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Created by the Territorial Legislature in 1841 and now representing nearly 8,500 member physicians, the Society's purpose is to "advance the science and art of medicine and the health of the people of Wisconsin; ensure that physicians are equipped to deal effectively with the economic and political aspects of practice; and serve as the patient and physician advocate to government and other relevant publics." The major activities of the Society concern medical education, peer review, legislation, community health education, scientific affairs, socioeconomics, health planning, service to physicians, operation of the Charitable, Educational and Scientific Foundation, and publication of the *Wisconsin Medical Journal*.

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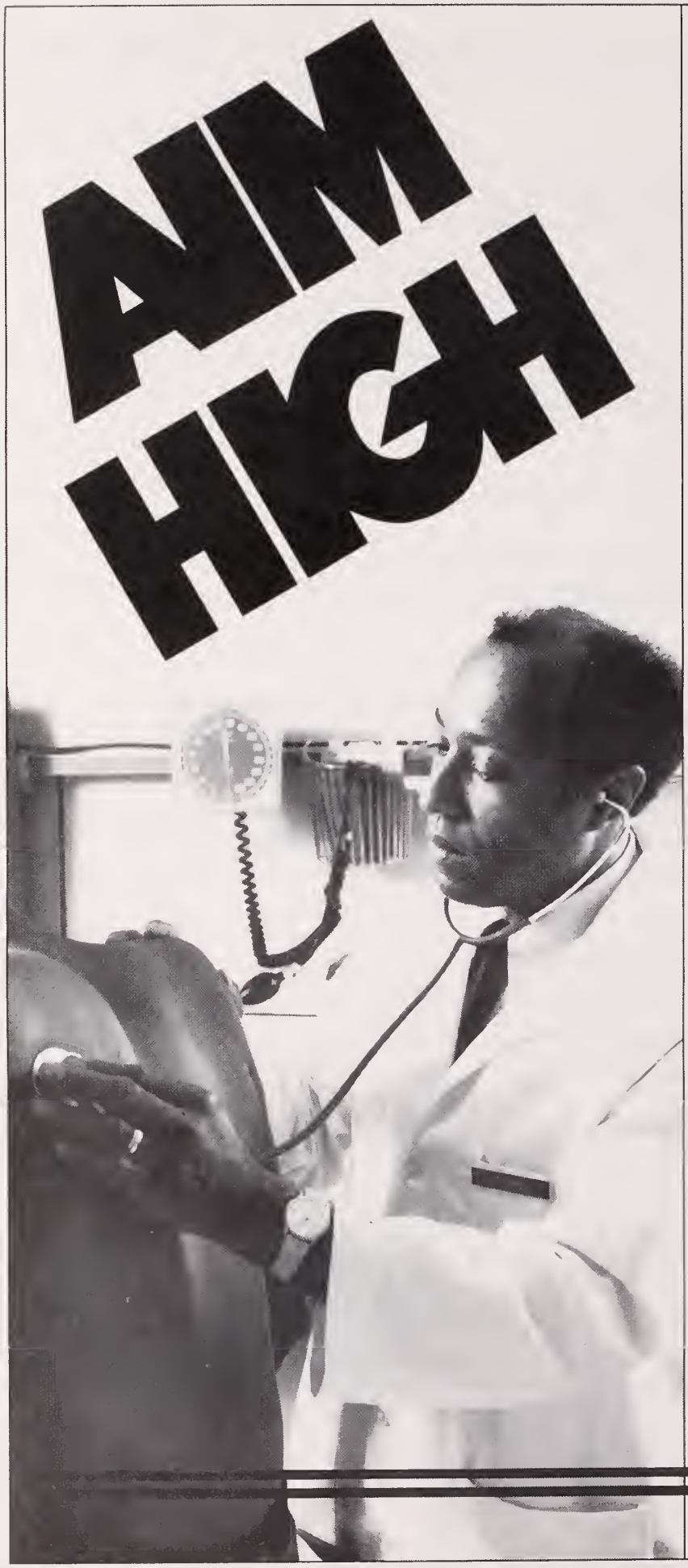
Our cover: Managed care is a difficult to define concept. It means something different to each physician trying to work with third-party payers for reimbursement, each patient seeking the best possible medical care, and each employer trying to provide an affordable quality insurance plan for their employees.

The *WMJ* looks at managed care and health maintenance organizations from different perspectives in an attempt to bring the issue into focus for you. Related articles begin on the following page and are referenced in the Table of Contents with the following symbol: .



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AIR FORCE

President's Page

Medical Education should not be Held Hostage to Managed Care, but Tuition should be Managed

THE PHYSICIANS WHO read this page are the products of the finest medical education system yet devised by man. In the eighty years since the Flexner Report was published, the medical educational system in the United States has undergone a drastic reworking and then a continuous fine-tuning process.

The result is splendid medical schools in virtually every state associated with outstanding teaching hospitals staffed by a combination of full-time faculty and volunteer clinical faculty. Faculty whose efforts and talents, combined with the substrate of the minds of the best and brightest students, has resulted in class after class of well trained physicians who have gone on to make their marks as skilled practitioners, researchers and, in some cases, medical and basic science faculty members in their own right.

The financial structure that has supported this wonderful educational edifice has been much less well thought out than the educational process itself. For many years, a combination of state subsidies, private dollars and monies derived from patient care and shifted to the educational side of the ledger, combined with the tuitions paid by the students, served to finance the medical education process.

Now, as managed care is having a major influence, either directly or in a competitive fashion with other insurance programs, the ability to cost shift has decreased virtually to the vanishing point.

One solution to the funding of medical education both in the medical schools and in the post-graduate system would be the establishment of an all-payor system. Such a system would impose a fee on all health insurance plans with the proceeds from that fee being used to fund medical education in both the medical school and the post-graduate setting.

In the post-graduate setting the monies would not necessarily go to academic institutions but rather would follow the resident and would be expended to support the salary and benefits of the resident and the direct and indirect medical education expenses.

Another principle which should be upheld in the discussion about funding education is the funding of research institutions, whether they are associated directly with university medical schools or are free-standing medical research institutions.

Private funding in support of these institutions is more and more difficult to raise. Governmental funds such as NIH monies are more and more difficult to obtain. These research institutions have provided the basic knowledge on which the scientific practice of medicine stands. If we do not continue to support these institutions and let them wither and vanish we will place ourselves in the position of a short- sighted people who have consumed their seed corn.

Richard H. Ulmer, MD

It behooves us, as practicing physicians, in our discussions with managed care organizations to add to our list of concerns the very important concern for the continuing support of medical educational institutions and medical research institutions.

We would serve our profession poorly if we did not protect the splendid legacy that we have received from our predecessors and do our part to pass it on intact or enhanced to our successors.❖

Letters
Healthcare of the Future

Editor's note: *The following letter is taken from comments presented to members of the St. Agnes Hospital Medical Staff by Ewald H. Pawsat, MD, a retired 88-year old pediatrician.*

THE PRIVILEGE OF living within a few years of both ends of the present century has allowed me to spend more than half those years in close affiliation with St. Agnes Hospital.

When the Sisters of St. Agnes Congregation, in 1896, entered into the healthcare field, medicine was still in its infancy. One hundred years later, we celebrate the key role our community hospital has played in our nation's remarkable progress in the health field since that time.

Today, healthcare must be recognized as one of the most rapidly growing institutions of our country. The remarkable advances in health research, science and technology during the present century have provided us with the best healthcare in the world.

By mid-century, the explosion of medical knowledge went beyond the capacity of individual physicians and created a growing need for medical specialization. One needs only to look about this room to appreciate what has happened to the role of physicians since that time.

Soon after mid-century, however, amid rapidly-expanding health facilities, services and improved care, the health field would undergo a significant transformation. While great progress continued in the professional practice arena, the control of healthcare delivery and administration was gradually taken over by third-party entry into the healthcare field under both government and private sector sponsorship.

The traditionally independent practice of medicine has gradually been integrated into our country's huge system of healthcare. Physicians and their supporting organizations, on national to local levels, no longer are in the driver's seat of the healthcare van.

Contending with ever-increasing, ever-changing, complex and restrictive directives of third-party origin (all breeding more paper work) has become a major task for everyone involved.

Under these new systems of healthcare delivery and administration, very little attention has been given to the cost proliferation inherent in the regulating and policing of these expanding programs. The current unconscionable media advertising and competitive marketing of the agencies must also be factored into these costs.

Unfortunately, our poorly informed society has not been made aware of the fact that, as a result of these new approaches to providing healthcare, one-third or more of the healthcare dollar is dissipated before getting to "hands-on" care of the patient.

Even though the healthcare of our nation can no longer be the sole responsibility of the health professions, we must look to these sources for guidance in healthcare and welfare problem resolution.

As St. Agnes Hospital enters Century Two under the umbrella of a regional healthcare system, we must have faith in recent local collaborative efforts to resolve our present healthcare shortcomings.

With the mission goals of the Sisters of St. Agnes, bolstered by months of expert consultation and new administrative leadership showing the way, our community looks to the medical profession for broad support and professional direction to assure a promising future for local healthcare, so ably structured and provided in the past.

Does the welfare of our patients deserve less?

--Ewald H. Pawsat, MD
Fond du Lac ❖

Note: Letters to the editor may be edited for length, clarity and grammar.

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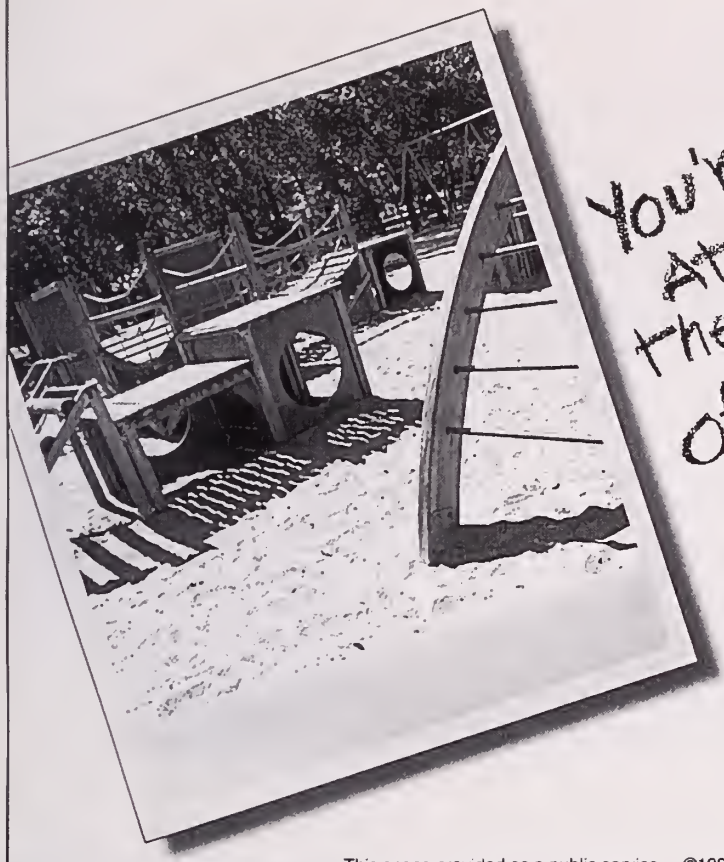

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Guest Editorial
Today I Cut Down A Tree

Len Scarpinato, DO, Milwaukee

Recently I bought a house and along with it came a tree. Mind you there are other trees with the house, but this tree was between the house and the garage. It was a fine old evergreen about 20 to 30 feet tall (a yew or a pine depending on who I talked to) that had gotten large and unwieldy. I liked the tree and along with a component of love that I have for all living things, I noted I approached it with a certain amount of reverence. But I had a problem. There was a limited amount of space and the need to transplant my beloved Wisteria from an old property in almost the exact same area as this tree. Also, the previous owners had not trimmed appropriately. So, I cut down the tree, almost with tears in my eyes. One hour of work destroyed 20-30 years of growth.

The whole process made me think about an academic program I tried to float over the last five years here in Milwaukee. It was known variously as the Stabilization of a Critically Ill Individual or The Procedure Fellowship or The Critical Care Fellowship.

The fellowship was designed for family practice residency graduates to add from six months to one year of extra training to help them in a rural setting to learn the things they are incapable of fitting in the jammed-packed three years of their residency.

I began having the idea almost simultaneously with moving here to Wisconsin when I began my family medicine fellowship; to me it seemed like a natural. Why not add some extra time to learn extra procedures, especially ones that would involve stabilization of patients who came in critically ill? In fact, many of the family practice graduates who end up in rural communities were telling me they did a significant amount of critical care, even if it was just a stabilization for transport.

This is the subject of a successful American Academy Family Practice three-hour course that I have been privileged to help develop and present over the last several years at the annual scientific meeting.

Len Scarpinato, MD

It all made sense but didn't fly. Why?

After consultation with the Vice Chair of Academic Programs in our department, a needs assessment was distributed to family practice graduating residents as well as practicing family physicians at the Winter Refresher. The response was surprisingly little. Discussion with the Chairman of the department initially revealed an interest on the part of some of the other subspecialty departments in just such fellowship, especially given the new move towards primary care.

The VP at my hospital was very interested. I even made it a subject of my administration faculty development fellowship. I was convinced one could do it because I knew of Family Physicians around the country who were in rural settings and were performing in these ways. As a matter of fact, there was almost a move towards developing a section of them at the Society of Critical Care Medicine several years ago. Over time, I realized I was the only one who ever brought the subject up or talked about it. It all fizzled out.

Mind you, this is not an uncommon event for someone in academia. One more experienced Academician once told me that if one idea or proposal out of five got accepted, you were doing pretty well. But this is the one that hit so close to home. I think I was trying to create a fellowship to duplicate what I had gone through with both my internal medicine and subsequent critical care experience and family medicine residencies.

But all that combined did not mean a fellowship would occur. Medical Education is path dependent -- we can't consider creating a new type of doctor such as this one.

Then came further cuts at the hospital, the VP was "downsized" out. Belt tightening at the medical school occurred. "Health care in flux," "we have too many doctors,"

Continued on page 10

Len Scarpinato is a Associate Professor, Department of Family and Community Medicine, St. Mary's Family Practice Residency Program at the Medical College of Wisconsin, Milwaukee. He can be reached at (414) 291-1605 or at his e-mail address: lenscarp@post.its.mcw.edu.

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Continued from page 8

"nurse practitioners and physicians assistants can do what many doctors do," were the headlines we were seeing and these were the buzz words and sound bites that we were hearing on television or radio. Seems like the pendulum of big medical industrial complex had swung in the other direction. Now we were going to downsize along with the rest of the country.

Not surprisingly, the number of inpatients was dropping (I don't know any hospital that's **up** in numbers), probably due to a significant reduction of length of stay, capitation programs and more outpatient therapies. It's extremely disturbing to see residencies even suffering. One editorial in *Lancet* last year described the fact that surgical residencies weren't seeing enough appendectomies to really know and diagnose appendicitis.

Back to the fellowship

I re-discussed with my program director, chairman of the department, and other colleagues. I was told that "it's probably best to put it on the back burner for now." I learned some important lessons about building consensus, politics, financing, shared vision, etc. So I'll wrap up my files, put rubber bands around them, shove them in one of my cabinets, and continue working in another direction. Kind of sad, though.

I noticed a funny thing the other day. The stump of my cut down tree had sprouted some shoots...❖

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Is There a Doctor in Charge?

by Laura Pulfer

MEMORANDUM

TO: Physicians
FROM: A Person Who Occasionally Gets Sick
SUBJECT: Health Care

Please permit me to be blunt.

Isn't it about time you rescue medicine from the questionable mercies of business and politics? You were the smartest kids in the class. So what happened? Why are you letting everybody else tell you how to do your job?

Most of us are acquainted with dullards who became journalists and lawyers and insurance executives. But I can't think of a single instance when I've heard somebody observe, "Geez, did you hear that Buzzy Binkley became a doctor? I always thought he was a little slow."

You people who became doctors were the good students, the bookworms, the Merit Scholars, the brains, the Eagle Scouts, the hall monitors. You were the ones whose homework the rest of us copied. Because you had the answers.

You are the people who have an arrogance so magnificent that you can put your hands around a pulsing human heart. You are the people with the grit to triage a bloody battlefield, to decide who will live and who will die. You are the voice that gives the bad news. You are the ones we trust with our babies.

Only for you would we have worn those drafty paper robes, sitting on your cold examining table. Only for you would we have waited in a room full of sick people and old magazines.

So, what's the problem? Are you scared of a bunch of bean counters? You whipped their butts on the SATs. And now they're making medical decisions "in consultation" with you. Consultation? Why aren't you running this show? Are you really prepared to become just another employee?

Now, in addition to shorter stays, hospitals are planning to use fewer nurses. Are you going to let hospitals cheap out on the people who care for us when you're not there? Of course, hospitals are just buildings and traditionally have been run by administrators. But you have always been in charge of patient care. You and the nurses.

What's going on here?

Hospitals are simply doing what they've been forced to do -- compete, cut, downsize. Stay alive. At least they have a plan. What's your plan? Have you sent your best and brightest out to do battle, attend the meetings, work on the committees?

Is it the money? Is it us? Are you tired of taking care of us? And our untidy illnesses? Does it honk you off that Shaquille O'Neal gets $120 million to dunk around balls, and you still owe money on your medical school loans?

Laura Pulfer

So maybe business is not your cup of tea. Maybe you hate meetings. Maybe you don't want to become a personnel expert or crunch numbers. Fine. That's OK. You can hire somebody to do that.

But when I get sick, I'd still like to know that there's a doctor in charge. Not some MBA, not a benefits manager at Proctor and Gamble or Kroger. I sure don't want Hillary Clinton or Newt Gingrich or Ted Kennedy to be taking my temperature.

You will notice that I have a lot of questions. Do I have the answers? Of course not. I was not smart enough to be a doctor.❖

Ms. Pulfer is a columnist for *The Cincinnati Enquirer*. Her address is *The Cincinnati Enquirer*, 312 Elm St., Cincinnati, Ohio 45202. This article was reprinted with permission from *The Cincinnati Enquirer* and Laura Pulfer, and appeared recently in the *Journal of the Medical Association of Georgia*.

Point...Counterpoint From November, 1996 *WMJ*

Thanks to those of you who responded (by both e-mail and snail mail) to the request for an ethical opinion. There was complete agreement that the patient's decisions should be respected.

The scenario, as you remember, was this:

Can a patient judged by the court to be incompetent still be considered "decisional" for some decisions?

Carl Junkerman, MD, Milwaukee, Member SMS Ethics Commission

A 92 year old man was admitted from the mental hospital where he and his wife had recently been admitted for protective placement. The court had appointed a guardian when the patient was adjudged incompetent. The gentleman was admitted for nausea and vomiting which were attributed to medication and soon subsided. He had had a myocardial infarction two years earlier, had diabetes mellitus, and had suffered several small strokes.

The ethics consultation was triggered by his refusal to eat adequate amounts of food -- he had lost 40-lbs. in the previous six months. When confronted by medical staff with the problem, he said that he knew he would die if he did not eat enough and that was his wish. He repeatedly and vehemently refused the suggestion of a feeding tube.

At the time he was seen by the ethics consultant he was sitting up in bed eating ice cream. He was alert and responded with a cheery and appropriate "Good morning." He confirmed that he would eat just what he wanted to and that he was aware of the consequences. He confirmed his steadfast refusal of a feeding tube.

Situation

You are a member of the Institutional Ethics Committee which is deliberating about this man's problem. What is your recommendation to the attending physician? Force feed? N-G tube? Gastrostomy? No action?

Some comments by *WMJ* readers

"I believe we should be supportive of his decision and continue our efforts to maintain comfort and dignity as he moves closer to that final day. "

"There is a myth in both the medical and lay literature that starvation is painful and patients suffer when they are allowed to starve...In our society, we have an emotional attachment to food that makes it difficult to for us to allow someone to pass on with less than normal weight. If food is love then the absence of food must be withholding love. It is an entrenched but illogical myth."

"I have become very comfortable with avoiding medical intervention at these very difficult times. I recognize also that everybody might not agree with my approach. I therefore discuss this very carefully with the patient."

L.H.F.

"The patient appears to manifest all parameters that are ascribed to a competent patient. Thus, I see no reason to intervene at this point."

D.C.M.

"I would advise the doctor to take no action and allow the gentleman to eat (or not eat) whatever he likes. To choose one's own food is a fundamental and time-honored privilege...Even the socially and financially incompetent should be able to choose regarding some fundamental needs."

D.A.S.

Discussion at the ethics committee meeting

"Competence" and "decision-making capacity" are often used interchangeably (incorrectly). Competence is a legal term--only a court and a judge can pronounce one incompetent. Decision-making capacity is a medical judgement which can be made by physicians or psychologists.

In this case, the patient has been declared incompetent by the Court. But can a person who is legally incompetent be decisional for a given decision? If so, his decision should be honored (if his guardian agrees).

Criteria of decisional capacity were then discussed. They included:

1. Understanding
   The ability to comprehend given information about his diagnosis, prognosis and treatment options as well as the effects of no treatment (which is always an option). In this instance "under-

standing" would include his knowledge of the effect of eating insufficient amounts of food.

2. Evaluating
   The ability to deliberate in accordance with his own values. The ability to manipulate information rationally and to compare risk/benefit of a given choice. Here the ability to explain his choices was of great importance.

3. Communicating
   The ability to communicate his choices and the reasons for them was the third characteristic of true decisional capacity.

The committee felt that he fulfilled all of the criteria of decisional capacity in spite of the fact that he could not manage independent living. The consequences of not acceding to his wishes were discussed -- it would mean placement of a naso-gastric tube against his will (perhaps later a gastrostomy tube) and most certainly the need to restrain his hands to keep him from pulling out the unwanted tube.

Ethics committee recommendation

The unanimous opinion of the EC members was that the patient's wishes should be honored and no tube placed. This was communicated to his attending physician and to his court-appointed guardian -- and both were in accord. The patient was offered food and continued to eat small amounts. He died in his sleep two weeks later.❖

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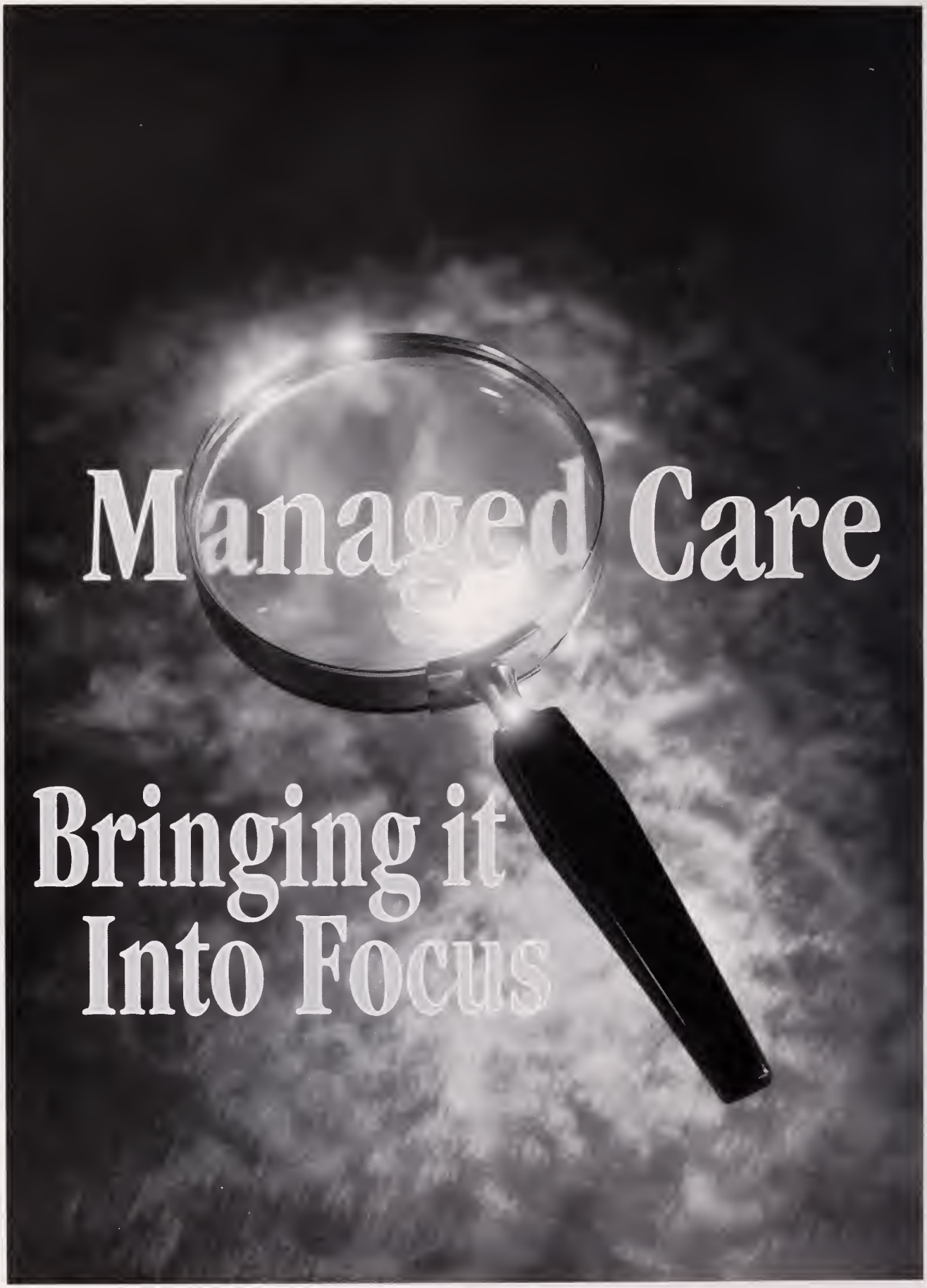
Managed Care
Bringing it
Into Focus

Bringing Managed Care into Focus

Judith D. Burke, managing editor

MANAGED CARE: the very name of this complicated, vastly encompassing delivery system for health care can instill fear in the hearts of patients and disgust in the bellies of many physicians.

But what do we mean when we say managed care? The truth is, managed care is different for every patient, employer, physician and insurer: that is the only common theme that emerges in these pages of the *WMJ*.

When the *WMJ* set out to look at the broad spectrum of managed care, we received a lot of positive feedback about the necessity to take a cold, hard look at this topic and to cut through the emotional rhetoric and bring some hard facts to light about what managed care involves. But when we actually set out to find the "truth," we found that it is, in fact, a highly-charged, emotional subject for all involved.

Researching the topic was easy, but finding physicians and insurers to actually talk to us "on the record" proved nearly impossible; many physicians simply did not want to be quoted criticizing their own HMO. And the HMOs didn't feel comfortable talking with us either.

Some facts we uncovered about HMOs nationwide:

- More than 80% of HMO-affiliated physicians are board-certified, compared with 62% of practicing physicians nationwide.
- Nearly 86% of HMOs asked their providers to follow clinical practice guidelines in 1995, a slight increase from 1994. More than 80% of the plans developed their own guidelines.
- Among HMOs that use externally-developed guidelines, 80% look to those developed by professional societies or medical specialty groups, and 42% use guidelines developed by the federal Agency for Health Care Policy and Research.
- Almost all HMOs (99.5%) conduct customer satisfaction surveys and use them to improve the quality of their services. Most (95%) use the information to evaluate and provide feedback to physicians.
- Nearly three-quarters of HMOs offered point-of-service options that allowed patients to see non-network providers in 1995, up from 61% in 1994.

Wisconsin is slightly above the national average in numbers of patients enrolled in some form of managed care program, with the Pacific region still having the highest penetration.

As the numbers of patients joining HMOs continue to rise, the HMOs will constantly change with businesses, federal and state governments, and physicians and patients all struggling to make sense of the need to control skyrocketing costs with the need to manage illness and long-term health among the aging American population. And while there aren't any clear-cut answers about what the future holds, certain trends will probably continue.

Experts anticipate that fewer specialists and academics are going to be needed, and some indications already show a growing rate of unemployment among hospital-based specialists, and salaries may continue to decrease -- pay for entering anesthesiology residents in large cities dropped last year from $150,000 to $100,000. Medical education will change, as well, with the development of curriculum that will include managed care, principles of coordination of care, continuous quality improvement guidelines, ethical issues, population-based health care, and more.

We've tried to bring you a balanced portrait of this incredibly difficult-to-define topic by beginning with a collection of letters and editorials from your colleagues who are out in the 'trenches' of this battle **(beginning on page 8)**, and a special reprinting of an editorial by *Cincinnati Enquirer* columnist and National Public Radio commentator, Linda Pulfer **(see page 11)**.

Our feature stories tell the tales of doctors' frustrations with the system of organized medicine and of the successes encountered by those who have stuck with it and are reaping the benefits and rewards that managed care can offer. Interestingly, we found that for every physician critic of managed care, there is a proponent singing the praises of operating within a structured, defined system. Our goal was to help bring the whole issue of managed care into focus for you and your practice.❖

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Managed Care and Patient Care: Bridging the Gap

Marc Kennedy, special to *WMJ*

ONE MANAGED CARE health plan covers an 11-year-old boy's bone marrow transplant. This includes finding a way to juggle the numbers to fly in the rare matching marrow from Australia, to the tune of an additional $10,000.

Another managed care plan refuses to allow a ten-year-old girl to see a pediatric oncologist to treat a Wilms tumor. Instead, an adult urologist at the same hospital is scheduled to operate. Upon the father's insistence, the pediatric specialist successfully resects the tumor in her liver, but the HMO will not cover the expense, and a lengthy court battle ensues.

Two children, two examples, two extreme views of the application of managed care, both with implications concerning right of patients to receive appropriate medical attention in the face of escalating health care costs in the United States.

Over the last decade, the debate over managed care has simmered, and at times, boiled. Proponents contend that HMOs, PPOs and other forms of managed care are essential to control the runaway costs of health care, and that more careful scrutiny would eliminate unnecessary diagnostic tests and arbitrary referrals to specialists that waste billions of dollars and do not improve medical outcomes for patients.

Adversaries point to managed care as a "corporate dream, but a nightmare for patients." They claim controlling costs is merely a euphemism for increasing corporate profits by limiting or eliminating certain medical practices; and that such practices in effect replace the Hippocratic oath with the bottom line.

While such examples and opinions represent polar opposites, reality for most lies somewhere in the middle. Certainly, as the trend toward managed care began, plenty of false starts occurred, plenty of mistakes were made as medical groups merged with larger health care plans. But through trial and error, many managed care plans are achieving the balance between containing costs and providing high quality health care. Several Wisconsin physicians discussed the past, present and future of managed care, and how it affects their relationships with patients.

Richard Roberts, MD

William Listwan, MD

Wisconsin's Take on HMOs

"When managed care plans started denying health care practices just to cut costs, and when insurance companies made decisions concerning patient care, this was bad for everyone" says William Listwan, MD, of West Bend, and former president of the State Medical Society of Wisconsin.

"These types of practices gave managed care a bad name. Soon, however, planners found that they had to get patients and physicians involved in the process of determining the best ways to monitor costs while delivering care appropriately, with the managed care administrators and insurance people acting as referees. To an extent, that has been gradually happening."

Another former SMS president, Richard Roberts, MD, of Group Health Cooperative in Madison, concurs.

"Have there been bad managed care plans? Certainly," says Roberts. "For example, mandatory short stays for new mothers, the so-called 'drive through delivery'." By the same token, Roberts notes that good managed care plans have options for new mothers, depending on their needs. Large groups like Kaiser and Harvard make early departure an option, and combine it with nurse and physician availability for home care visits. So in this case, the plan is not just casting out mother and child — it's offering an option based on

Continued on next page

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individual needs.

"However, some of the new guys on the block are more interested in quarterly reports to shareholders than post-natal care."

So, Roberts feels, they may push for early departure from the hospital, but may not offer follow-up home care. This is the bad side of managed care.

But on the other hand, legislative mandates prompted by vocal minorities or special interest groups don't necessarily make for good medicine either. When state legislatures decree that "thou shalt keep newborns and mothers in the hospital for 48 hours" this ignores options mothers may want and their physicians can approve with appropriate follow-up care.

"This should be the major focus of any health care plan — letting the physician and patient decide what is best in each individual case."

Managed care plans that work best are those that promote this type of environment.

"Nothing is as valuable to me," continues Roberts. "When HMOs try to dictate to physicians how they can treat their patients, that's when there is a problem; that's when we squawk. Politicians often view the concept of the physician as a patient advocate as a smokescreen, but I doubt whether many physicians could look patients in the eye unless they were their advocates."

Autonomy a key issue

In many of the early plans, the key point of contention for numerous physicians was a lack of autonomy in making decisions that affected their patients. To the public, managed care was often seen as an uncaring, distant meg-corporation that made what appeared to be capricious and somewhat mean-spirited determinations concerning access to adequate and appropriate medical services.

"Most people were concerned about larger national organizations that take a huge administrative fee off the top, and leave rest to patient care," says John Barkmeier, MD, Medical Director of United Health of Wisconsin in Appleton.

"Some created (cost-containment) rules that made it difficult for physicians to care for their patients properly" which prompted outcries from both doctors and patients.

As these concerns became evident, managed care organizers learned that they could not long survive if the two integral components in the health care equation — the patients and physicians — were angry and dissatisfied about lack of input and control over health care decisions.

Now, many of the managed care systems in place in Wisconsin are run by physicians, some non-profit, some for-profit, or have physician input built into their operations. But that's not to say one particular formula is the norm.

"I can say one thing about managed care," says Roberts, who travels often around the country — last year to 45 states — to confer with colleagues on a variety of medical issues, including managed care. "You see one plan, you see one plan. There are as many different plans as there are different plans."

Laissez-faire managed care

"Managed care is really a generic term today," says Listwan. "There are many different perceptions of what it is and is not and what it should be, depending on the viewpoint — employers, patients and physicians. Therefore, you really can't say that in general 'managed care is good or bad.' It depends on the situation and how the plan is run, who has input, and how well the system lets physicians treat patients."

Some plans run so well physicians can't readily distinguish a fee-for-service patient from an HMO patient.

"The way our clinic is run, the whole 'managed care' concept does not really affect how I treat my patients," says Scott Beede, MD, at the Skemp Clinic in La Crosse.

"I have some patients who are fee-for-service, some that are Medicare, some that are HMO, and they are all treated the same. I really don't know one designation from the other. In my three and one-half years here, I have never had a referral refusal. Also, there is an open formulary; we are not restricted concerning the drugs we can prescribe."

It's not as though the clinic is not managing costs or is spending exorbitantly, according to Beede. Though it is a non-profit, physicians are still responsible for controlling costs, but not to the detriment of patients. This is possible, he adds, because MDs are involved in HMO operations, and there is a commitment to putting dollars back into patient care.

"It's a physician-friendly system," he says of Skemp.

"For example, utilization review is controlled with education, not sanctions. It is not totally run by bean-counters but by people who take care of patients day-to-day. I believe our cost controls are as good or better than those medical centers that have closed formulas. Rules are not made just to cut costs without considering patients. I think the direction for the future is physician-led managed care."

Barkmeier echoes Beede's observation. "As a physician-owned company, we don't have to worry about lack of autonomy. We work very closely with employers and patients and have a great deal of input into the operation and how we deliver medical care. Properly-coordinated care is more efficient and higher in quality."

Controlling costs in this manner is just good medicine to many doctors.

"There is nothing wrong at all with the concept of managing care," adds Listwan. "Maybe the medical profession should have been doing this more closely over the last 20 years. Physicians did so without really thinking about it, in the days before health plans when patients paid for most everything. Then someone would be a little reluctant to pay for an X-ray unless it was necessary."

Managed care has led Listwan to alter some of his practices, in the name of both cutting costs and in practicing good medicine.

"Fifteen years ago, I would regularly order X-rays for sinus infections," he says.

"Once I began dealing with certain capitated patients, I was compelled to review just how much they really needed it."

Listwan found that indeed X-rays were not as routinely required, and he began using the same criteria for all patients.

"You just don't treat patients differently because of their health plan. If it's a good idea, you do it across the board. Here's an instance where ten percent of my patients changed how I treated everyone else."

When group health plans began to flourish in the 1970s and 1980s, there was a tendency to over-prescribe for a variety of reasons, according to Roberts.

"You wanted to make sure you were practicing 'modern' medicine, to an extent. Also, the clinic or hospital paid for the latest equipment, so there was an imperative to use it. And, since it was covered by insurance, there was no incentive not to run tests."

"Plus, in late '70s and early '80s when malpractice suits began to increase dramatically, doctors often practiced 'defensive' medicine, and ordered tests, X-rays, scans, etc. just to prevent liability suits."

This led to abuse of the system, added to already increasing medical costs and helped to prompt the movement toward managed care.

Doctors as patient advocates

The advent of managed care and its concomitant emphasis on applying medical resources prudently does not preclude a physician's role as an advocate for patients, physicians say. Opponents argue that it is in the interests of physicians to hold down costs, to basically ration care because it affects their compensation, particularly under capitated plans. Roberts says they are missing the point.

"It's not just the system," he explains, "it's how it's carried out. Any system can be unethically operated. In the old days of fee-for-service, doctors used to get more when they did more procedures or ran more tests. Interestingly enough, if you chart fee-for-service and managed care, studies have indicated that quality of care and patient satisfaction are nearly the same. The only thing that has changed is the amount of resources expended."

Something else that has begun to change within managed care is the approval system.

"This was a problem when many plans were in their infancy," says Roberts. "But as the market matures, many have eliminated the approval process for referrals."

Listwan concurs that this sort of rigmarole irritated physicians. "Doctors don't want to have to call some 800 number a thousand miles away, be put on hold for ten minutes, then be told by some clerk on the other end of the line that the patient can't have a certain procedure or drug. This doesn't sit well with physicians."

Listwan observed that the physicians got caught up in all kinds of paperwork, and after all that, the patients got what they needed anyway. It was too frustrating; the system needed to be amended. Even Medicare did so.

"They found that they were spending an incredible amount of time on administration when in the end most requests were authorized anyway," Listwan notes.

Though there is much less direct management than there was ten years ago by providers, Listwan says, confrontations still happen.

"When I am told that a patient cannot have something I think they need, I demand that the provider put it in writing, have the supervisor sign it and fax it to me immediately so I can put it in the permanent medical record," he explains.

"I remind them that saying 'the insurance company will not pay for this' won't hold up in court. I rarely have a problem after that. But even more important, I owe more to the patient. I need to go to bat for the patient, to be an advocate. Sometimes this means being a little aggressive on their behalf."

Listwan adds that he does think that more co-pays and deductibles are a good idea. "It gets patients more involved with their physician in determining what type of care is best since they're paying for more of it," he says.

Family practitioners, specialists and managed care

Family practitioners are "the darlings of managed care," says Roberts, "because it's one-stop shopping."

"We are trained as generalists and are more cost-effective. Sure, we refer to specialists, but 90% of the time it isn't necessary because we know our patients' personal history. Instead of seeing a regular family practitioner for a headache, a patient goes to a neurologist, at $200 a visit, who orders blood tests, MRIs, etc. This costs $2,000 rather than a five-minute phone conversation that costs nothing."

"In a way, the rest of medicine

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is like the dinosaurs, and the family and general practitioners are like the furry little mammals."

"We're where we need to be — distributed amongst the populace. We treat the whole person, the family, not just one medical issue. This is just what managed care is looking for, which is fine for GPs, but this is not so good for highly-trained specialists."

Roberts estimates that due to changes in health care and managed care, there are too many specialists.

"We will likely see a 20% to 40% drop in specialists because of this excess capacity. There's just not enough work to go around. Managed care organizations will barter with specialists who will do procedures for less. It will get to the point where some won't do it for that amount and leave the area or switch fields or get out of the profession. It's unfortunate for the specialists, but that's where we are headed."

Specialists are certainly needed, as are the technologists and scientists, but when it comes to patient care "we don't need the number of technology wizards that we have produced," says Roberts. It's a matter of balance, which managed care will help control during this transition" toward a greater emphasis on family practitioners.

"The central role of family practitioners is caring for patients, part of which is curing sometimes, alleviating suffering sometimes but to comfort always," he continues.

"Nearly all societies have had some form of healer, or shaman. To them, part of treating illness was also helping people derive meaning from the advent and end of life. You can't get that from a machine. Technology and science are important tools, and can do wonderful things, but they cannot offer patients a sympathetic ear concerning mortal issues. In the same way, some people are more technologically rather than personally oriented, so they make good researchers but lousy clinicians."

Creativity the challenge

The next challenge appears to be working with the various elements — employers, providers, insurers, consumers — to make the most out of scarce health care dollars. Preventive medicine comes to mind, but with people jumping from one plan to the next so often, many providers and insurers are less likely to promote comprehensive programs.

"Insurance companies are somewhat hesitant to fund prevention because they are not guaranteed to reap the rewards downstream," says Listwan. Still, many are attempting to do so. He says that in West Bend, some employers are trying to build differential costs into policies for non-smokers, either charging smokers more or giving rebates to those who don't.

To Barkmeier, part of the challenge is to find new approaches to bring more people into the medical system.

"Many times we find we are talking to the converted," he says.

"What we really need are ways to reach patients like diabetics, or to better immunize children. This requires more creative thinking, and more work."

Roberts pointed to such a program in San Diego, California.

"A health care provider instituted a home visit program to their elderly patients who live alone," he explains.

"They made sure they were taking their medications, made sure they were eating right, and assessed their living arrangements to minimize things like falls in the home. The program paid for itself by eliminating visits to the ER or hospital stays for things like broken hips due to falls."

Quo vadis — where to from here?

Barkmeier suggests that treatment parameters will be developed by large providers such as Dean, Aurora, or Marshfield.

Created with consensus from physicians, these protocols will ask practitioners to follow certain guidelines for referrals, ordering tests or CT scans, X-rays, etc.

"These are necessary, due to lack of continuity," he says, "but must allow for adaptation to local conditions. Right now, physician practices are all over the place.

"Big groups will likely use these protocols to shop around to large insurers," Barkmeier continues. "But it won't be 'one size fits all.' That won't work" as was found in the early days of managed care.

"If there isn't local physician input, it won't be accepted. You might be able to use some form of national practice standards as a template. But then again, for every one guideline you show me, there are five that are different."

Obviously, this is a never-ending process. Roberts sees managed care as a transitional stage, removing financial risk for medical care from third party insurers to the doctors, much as it was 50 years ago.

"Back then, we treated someone and maybe we got paid."

He admits that this shift from what he calls a "utility model to a market model can lead to unfair competition, and can harm patients during the transition phase.

"But," he adds, "that will make us think about how we spend money on health care.

"With capitation, procedures are down 30%," says Roberts, "but outcomes are still the same. This shows us that we may have been doing procedures unnecessarily. Now we're beginning to look at what the population really needs. We spend $1 trillion dollars on health care, most in world, yet we are 9th in longevity, and 12th in

infant mortality.

"And are people feeling better? Are we treating them better? Not necessarily. Not according to these numbers. So if we are spending all this money, where is it going? Some are going to perform excess procedures, therefore we are not putting resources where they belong."

For example, he cites the infant mortality rate. "It's so high because we lack appropriate access to prenatal care. This is avoided because it is treated not as a medical issue, but as a 'social issue'."

Roberts is convinced that the evolution of managed care will continue to force the nation to more carefully scrutinize how health care dollars are spent. Whatever form it takes, he is just as certain that the role between patient and physician must remain paramount for any system to function effectively. This seems to be occurring now, he adds, and though the progress has not been painless, great strides have been made in the last few years.

"When Bill Clinton was talking about health care reform in 1992, the market was already way ahead of him," says Roberts.

"When we look back on this, the evolution of the American health care system will rank as the largest economic restructuring process in history. Think about it: one-seventh of the world's largest economy in absolute dollars is undergoing a significant change. This is bigger than the Industrial Revolution. Still, an upheaval on such a grand scale is not without its costs." ❖

Working For The Plan: Physician Autonomy Under Managed Care

Howard Bell, special to *WMJ*

He's managed care's prophet of doom. Ron Stark, MD, a Milwaukee hand surgeon, prophesizes the end — not for managed care — but for doctors, their profession, their way of life.

"Managed care takes decision-making autonomy away from doctors," he says. "Medicine has ceased to be a profession. We've become technicians."

Paying little attention to Stark's minority view, physicians are rushing to embrace managed care by selling their independent practices to become employees of large systems. No physician today — independent or employed — escapes managed care's cost-cutting blade: discounted fees, practice guidelines and limited patient access to services.

"Any physician who says it's more fun to practice now is lying," says Stark. "Who could enjoy having to explain every little decision to everybody every time? It's a crock."

Managed care critics say pre-authorization, formularies and practice guidelines strip physicians of decision-making. Productivity incentives like pay withholds, end-of-year bonuses and quotas turn doctors into assembly line widget fixers. Salary and reimbursement schemes discourage referrals. Frustration festers among sub-specialists, who watch helplessly as primary care doctors perform procedures specialists were trained to do.

"The only physicians who have retained or gained decision-making power," says Stark, are in non-clinical administrative positions. "They've oozed into a good situation. Some are concerned about what's right for patients, but others are traitors who've sold out their profession."

Do manage care cost controls and loss of physician independence affect medical judgement? "Of course," says Stark. "The person who pays you influences how you behave. You change from a patient advocate to a company advocate."

Big medicine, the argument goes, treats populations, not individuals, which conflicts with a physician's role as patient advocate. Suddenly, doctors are forced into a new role: guardian of society's limited resources. Physicians are now paid to weigh an individual's need with the company's need to serve all patients and control costs. Ergo, says Stark, "physicians are no longer primarily concerned with patient health."

Stark believes managed care is anti-competitive because doctors no longer compete on the basis of quality, which is how patients are best served.

"Corporations that buy doctors don't care how good you are or what's on your CV. They care about quality second, control first."

Continued on next page

Howard Bell is a freelance medical writer living in Onalaska, Wisconsin.

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More than two dozen physicians in Milwaukee have formed their own network to deal with contract negotiations with health insurance companies, managed care organizations and self-insured employers.

Marshal Mirviss, MD, President of Integrated Physicians' Care LLC, recently told *The Business Journal's* Julie Sneider that the network was formed "for doctors who want to 'take charge' of patient care again. Many feel that role has been taken away from physicians as managed care's influence has grown."

Mirviss went on to say that, "The question is, 'Do we physicians want insurance companies and health care companies to make the (patient care) decisions for us?' This network is a way for our voice to be heard. We know what is the best way to provide medical care and still be cost-effective."

Integrated Physicians' Care network is made up of physicians who are in small or solo practices and who want to remain that way. They don't want to sell their practices or merge with larger groups. The network provides a means to retain independence and still benefit from being part of a larger group for negotiating contracts.

But while a majority of their colleagues concede that physicians have lost autonomy from the days of independent fee-for-service practice, in many cases, they don't find that so bad. The trade-offs are worth it and quality of care has never been better.

Pressure to change

Physicians are surrendering autonomy and independence for good reasons. They want job security, a steady patient flow, reasonable hours, access to outcomes data, and deep corporate pockets. Many want out from under medicine's crushing business headaches, too. The new medicine favors integrated, interdisciplinary teams and puts solo and independent practices at a competitive disadvantage. Physicians rightfully fear they could lose their patients with the stroke of a pen.

Benjamin Schmidt, MD, was a solo family practitioner in Waterloo. He still practices in a one-doctor office, but as an employee of Physicians Plus. He feels that large system affiliation gives him a competitive advantage when negotiating managed care contracts.

"On my own, I would not be able to keep up with the legalese," he says. "I might be taken advantage of in negotiation." Schmidt felt Physicians Plus would make it easier for him to recruit a partner, too.

"I was so busy, I never got any vacation. I knew I'd have to recruit a partner some day, but with cost of recruiting as high as it is, I decided I probably couldn't afford it on my own."

Mary Davis, MD, a Columbus family practitioner, joined Physicians Plus so she'd have more time to see patients. "I was spending too much time on the business end of things," she says. "It was taking time away from patients."

Lief Erickson, MD, a general surgeon with Burlington Clinic, says his group joined Aurora Medical Group because they needed access to capital. They also liked Aurora's vision for not-for-profit physician-led integrated delivery.

Timothy O'Neil, MD, formerly a family practitioner in Columbus, says he joined Dean Care to get his life back. He now practices urgent care in Madison. "As a rural practitioner, I was too busy. I wanted more time with my family," reflects O'Neil.

Giving up some autonomy is a practical response to social and economic pressures shaping medicine. Business and government want evidence-based medicine. Show us our health care costs are decreasing, they demand. Show us our employees are healthier.

"To practice medicine effectively," says Thomas Koehler, MD, an internist with Aurora's Deckner Clinic in Green Bay, "we need information that documents outcomes and costs. Businesses are crying for it and there's no way we'd have resources on our own to generate that kind of information." Koehler and his partners sold to Aurora two years ago. "We've gone from playing solitaire to playing football," he says. "Today you have to be part of a team."

Robert Willis, MD, a pulmonologist with Aurora's Sheboygan Clinic agrees. "Running your own show is nice," he says, "but we gave that up to meet the future. Autonomy can mean a person admitted with pneumonia could be treated 50 different ways, he says. Doing it your way is not necessarily the best way."

Treatment guidelines have improved quality and lowered costs, according to Willis. "We've shown again and again when a bunch of docs get together and agree on one or two protocols for things like diabetes, asthma and pneumonia, morbidity, length of stay, and time off from work, costs go down. Sure we gave up our independence, but we're better physicians now."

Not true, says a primary care physician in southeastern Wisconsin who asked not to be named and bluntly described his experience with managed care. "There is no such thing as a standard patient," he says. "One person with pneumonia might need a completely different treatment than another."

O'Neil does not find Dean Care's practice guidelines too restricting or infringing and he's allowed input on guidelines that affect him. "I was always reluctant to join a large group for fear I'd lack autonomy," he says. "Now that I've done it, I don't really notice any significant impingement on my ability to practice how I want

to practice."

The key to preserving physician autonomy, say most physicians, is to get as much physician input as possible into practice guidelines and other key issues.

Remote control medicine

Most physicians interviewed agreed insurance company pre-authorization is what most erodes physician autonomy. "It's not good practice to have non-physicians denying authorizations," says Erickson. "It's the insurance companies that affect our autonomy. Aurora has done nothing to dictate how we practice."

Erickson admits he can't remember any necessary procedure being denied and he doesn't necessarily disagree with most decisions. "But I sometimes feel their decision is not based on valid cost/benefit analysis."

Davis objects to what she calls "remote control medicine." "Authorization people from out-of-state insurance companies sometimes make decisions when they have no idea what resources are available here. They don't realize this is not California. We basically have discounted fee-for-service medicine."

"Pre-authorization," says a doctor who did not want to be named, "is an insult to the medical profession. Why should physicians have to bow and scrape before people who don't even practice medicine? They call it cost containment, but we're really sacrificing patient care to HMO greed."

Stark admits managed care tools like pre-authorization, practice guidelines and quality controls have their place. And yes, he acknowledges that there have been fee-for-service abuses. "But they've been blown way out of proportion as an excuse to tighten the screws and I can tell you the same minority of guys who ripped off the fee-for-service system are the first in line to abuse managed care. They're the ones who'll take the contract no one else touches and find a way to make it work."

Referral patterns

Most physicians say managed care controls their referral patterns, but not to an extent that harms patient care. "We refer more to other Aurora docs now," says Erickson, "but that's the team we're on."

"What my patients need is almost always on the list of providers," says Schmidt. Schmidt has had no problem getting out-of-network approval when a patient needed it.

Davis, who's practiced for three years, says HMOs have always dictated referral restrictions, but she has three large groups of consultants from which to chose. "As a rural doctor, this is the best of both worlds. I'm part of a large group, but I have a broad referral base."

Stark says he can no longer send patients to have tests done where he thinks they ought to be done. "I no longer have decision-making power to send my patients where they will get the best splints or best therapy," he says. "I have lost the power to make sure my patients get equal treatment."

Physicians no longer control referrals, according to Stark. The system does. "There's no question managed care ratchets down referrals to sub-specialists. Patients I'm seeing are further down the line with more problems. They have to complain a lot more before they get a referral. Managed care considers me unnecessary. Whenever possible, they have another physician do what I do."

Formularies that limit drug options are as much a source of confusion for physicians as a source of resentment. "I have six formularies," says Davis. "Keeping them all straight is a major problem."

"I used to get my drugs from the local pharmacy," says Schmidt, "but formularies are not a problem because they usually include a satisfactory alternative to what I would have selected."

Schmidt says he can get approval to prescribe out of the formulary if necessary, and also gets approvals on orders for durable medical goods, which he must now order from a specific vendor. He no longer has input on who supplies his immunizations, but he takes a c'est la vie attitude toward such changes.

O'Neil says Dean Care's formulary is a little more restrictive than what he was used to, but he can live with it. "I get a monthly printout showing how many times I violated the formulary, but I look at it as a challenge to comply."

Control over office decisions like hiring and purchasing vary depending on a physician's specific situation. "Decisions I used to make on my own," says Schmidt of Physicians Plus, now go through a chain of command. "It's frustrating, but I'm getting used to it."

"I'd like a PC in my office," says Davis, "but they're not ready to give me one, so I guess I'll have to buy it myself."

Aurora physicians interviewed say local clinics still make most such decisions.

Who's calling the shots?

Critics say financial incentives like pay withholds and end-of-year bonuses definitely alter physician practice styles. "A bribe is still a bribe," says Stark. "They're taking away income for doing what's good for patients. You increase efficiency by increasing volume of patients. You change how you practice to accomplish this or else you make less money."

Whether physicians are satisfied with their decision-making autonomy under managed care depends on each physician's specific circumstance, career expectations, even their age. "Older guys," says

Continued on next page

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Stark, "sell out to get out from under office management hassles and to get a sweetheart deal on their practice. A lot of physicians with 15 or 20 years of practice left hold their noses and do what they don't want to do. The younger ones don't know any better."

Koehler has a different take on the age factor. "There's a tremendous difference in mindset between established physicians and younger physicians. Change is difficult and older doctors are having a tougher time with it."

Koehler says his biggest frustration with managed care is the minority of his colleagues who mistrust what 'team medicine' is trying to do. He suggests physicians who grumble about quality issues are masking what really frustrates them — change and loss of control.

But control is exactly what managed care offers doctors, according to Koehler. "There is strength in numbers," he says. "Medicine will evolve into a triad of superpowers: providers, payors and insurers. In the past, payors and providers have been weak. Physicians will have a say in how medicine evolves if we work together." Another physician who asked not to be named sees it differently. "Doctors are so afraid of getting screwed by the insurance companies, we get together and screw ourselves."

"Somewhere in this new framework," says Stark, "doctors lost the reins. Insurance companies can't believe how stupid we are. Physicians need to organize and speak out publicly. We're on a slippery slope. The less we stand up for what's right, the less power we have."

Most physicians willing to go on record endorse managed care and physicians employed in large integrated systems. But they believe physicians must run such systems to ensure quality and reduce loss of physician autonomy.

Koehler, for example, says there is concern among his colleagues about who's making decisions in the non-physician led for-profit HMOs starting to penetrate Milwaukee's market. "One such HMO," he says, "required all X-rays be read by one particular group. It's decisions like these that drive physicians nuts."

Whether managed care is on a slippery slope to oblivion or a learning curve to perfection is a matter of opinion. Many physicians feel that far from rendering doctors impotent, managed care empowers them with quality-enhancing resources and data they could never obtain if they were still practicing independently with no cost controls in place. What some prophesize as the end, may only be the beginning.❖

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Wisconsin Health Maintenance Organizations by 1995 Enrollment

Status	Plan Name	Affiliation	Type	MDs	Enrollment in 1995	Region Served (Counties)	Premiums (,000s)	Net Income (,000s)
For-profit	PrimeCare Health Plan	United Health Care Corp. Minnetonka, MN	Network	3,094	217,625	SE Wisconsin (9)	294,305	5,056
For-profit	CompCare Health Services	Blue Cross Blue Shield of Wisconsin	Network	2,844	156,238	SE Wisconsin (13)	276,005	1,235
MD-led for-profit	DeanCare Health Plan	Dean Health Systems/ SSM Health Care	Group	959	149,455	Southern Wisconsin (18)	239,734	4,934
Not-for-profit Coop	Family Health Plan Cooperative	Family Health Systems	Staff	94	106,081	SE Wisconsin (6)	176,465	1,160
For-profit	Humana/WHO Insurance Corp.	Humana, Inc. Louisville, KY	IPA	1,911	99,921	SE Wisconsin (14)	160,378	1,221
MD-led for-profit	PhysiciansPlus Insurance Corp.	Physicians Plus/ Meriter Hospital	Network	546	87,520	Southern Wisconsin (16)	128,327	1,056
MD-led non-profit	Security Health Plan of Wisconsin	Marshfield Clinic	Group	1,169	76,025	North Central Wisconsin (26)	113,081	(1,915)
For-profit	Unity Health Plans Insurance Corp.	Blue Cross Blue Shield of Wisconsin	IPA	2,691	61,837	SW/Central Wisconsin (28)	100,356	1,050
MD-led for-profit	United Health of Wisconsin Insurance	United Investors	IPA	525	61,709	Fox River Valley (7)	69,020	1,245
MD-led for-profit	Network Health Plan of Wisconsin, Inc.	Network Health Systems La Salle Clinic	Group	260	47,223	Fox River Valley/ SE Wisconsin (19)	60,194	2,411
Not-for-profit Coop	North Central Health Protection Plan	None	IPA	842	40,969	North Central Wisconsin (9)	61,662	(361)
Not-for-profit Coop	Group Health Coop. of South Central WI	None	Staff	541	39,429	South Central Wisconsin (8)	58,114	1,299
For-profit	Emphesys Wisconsin Insurance Co.	Humana, Inc. Louisville, KY	Network	1,372	30,158	Western, SE Wisconsin (27)	43,228	(977)
For-profit	Valley Health Plan	Blue Cross Blue Shield of Wisconsin	Group	189	28,711	Northwestern Wisconsin (19)	41,869	1,529
For-profit	Maxicare Health Insurance Corp.	Maxicare Health Plan, Inc. Los Angeles, CA	IPA	965	17,247	Milwaukee Area (4)	27,132	471
Not-for-profit	Atrium Health Plan	Blue Cross Blue Shield of Minnesota	IPA	5,811	16,355	Northwestern, SW Wisconsin (28)	14,944	(1,677)
MD-led non-profit	Greater La Crosse Health Plan, Inc.	Skemp Clinic/Franciscan Health Systems	Group	165	15,348	Southwestern Wisconsin (7)	17,662	143
For-profit	Genesis Health Plan Insurance Corp.	Genesis Health Care, Inc.	IPA	600	15,224	Milw, Kenosha Counties (2)	7,728	152
Not-for-profit Coop	Group Health Coop. of Eau Claire	None	Staff	29	14,289	Northwestern Wisconsin (9)	21,444	(289)
For-profit	Managed Health Services Ins. Corp.	Coordinated Care Corp.	IPA	1,660	14,225	Southeastern Wisconsin (6)	23,564	1,423
For-profit	MercyCare Health Plan, Inc.	Southern Wisconsin Health care System, Inc.	IPA	206	8,762	Southern Wisconsin (5)	11,874	(471)
MD-led non-profit	Gundersen/Lutheran HMO, Inc.	Gundersen Clinic	Group	430	6,605	Southwestern Wisconsin (9)	3,143	(109)
MD-led non-profit	Medical Associates Clinic Health Plan	Medical Associates Clinic	Group	172	3,872	Southwestern Wisconsin (4)	7,492	(110)
Merged/ PrimeCare	MetraHealth Care Plan of WI, Inc.	United HealthCare Corp.	IPA	955	256	Southeastern Wisconsin (12)	455	5

Source: Wisconsin Office of the Commissioner of Insurance (1995 Data)

Doctor-led Managed Care Organizations
-- *The Answer for You?*

Jeremy Pittenger, contributing editor

MANAGED CARE, in one way or another, has changed the role of insurance companies, hospitals, employers and even some government agencies. Approximately 100 million Americans are enrolled in managed care. Today, about 75% of all physicians are aligned with at least one managed care contract. This relatively new health care system has become the vehicle by which doctors can maintain the most patient relationships and retain salaries.

Consumers and physicians alike are perplexed, especially when it comes to making a decision about what type and which managed care organization to join. Many physicians are choosing ones their profession can own and govern, known as MD-led HMOs.

A doctor participating in a managed care organization is taking part in a business venture. Businesses, to no one's surprise, want to make money. Hence, physicians become forced to deal with the responsibility for overseeing the health of their patients *and* staying active in the health of the business in ways that may be unfamiliar to them.

As with any complex business situation today, managed care is not one easily definable system. And, according to Bradley Manning, MD, Madison, if nothing else, managed care has put "more control into the system."

Wisconsin has roughly 25 managed care organizations in place **(see p. 28)**, and of those, about one-third are run by physicians either for profit or as not-for-profit organizations.

Managed care organizations that are either fully- or partially-owned and governed by physicians are increasing in popularity around the state. According to the physicians who belong to these groups, there is comfort knowing that the doctors help control the organization so that the physicians' and their patients' best interests are always kept in mind.

Overall, it seems that job satisfaction is highest among the physicians affiliated with this type of a managed care organization. Following is a brief description of several of these physician-owned plans.

Are there differences?

Some might say the difference between a for profit and a not-for-profit HMO can be found in what each is seeking as its end result. However, are they really seeking different goals? The assumption can be made that those entering a business, despite how it is defined, are still profit motivated.

Not-for-profit organizations have an outstanding reputation for focusing on good health initiatives. Not-for-profits are known for their charitable work, medical research and their commitment to the community. However, like all businesses, they need and want customers to keep their group running.

For-profits are more direct about the intent of their public relations campaigns. They are known for their heavy advertising, business-focused attitudes and their need to be responsible to their shareholders. It is common for for-profits to enter communities which are dominated by not-for-profits, and, in some cases, buy them out or eventually expand their own organization.

The difference between the two lies in their tax status, entrepreneurial focus and their outlook for the future. However, we can see the two combining characteristics every day. As they aim to incorporate traits of the other, their differences become fewer.

Physicians Plus

Bradley Manning, MD, Madison, belongs to Physicians Plus Insurance Corporation. The physician-led, for-profit HMO has approximately 546 medical doctors in its membership. Dr Manning, a plastic surgeon, has been with the organization since its formation in 1986. His decision to join was based upon how quickly managed care was growing in the mid-1980s. Everyone seemed to be taking part in this new service and he didn't want to be left out.

"I joined Physicians Plus because it is doctor-owned," said Manning.

"I see this as a benefit because there seems to be more of a

Bradley Manning, MD

commitment to the community. There is a sense that because we help govern the organization, our reputations are more at stake."

Dr Manning believes that doctors involved in managed care organizations must be more informed of government policies, more responsible with costs and must find more efficient ways of conducting the business of medicine.

Community Physicians Network

As Manning and many others see it, managed care is here to stay. Many of the organizations that started in the mid-1980s are still going strong today. For example, Community Physicians Network (CPN), based in Sauk City, began in 1984 under the name Rural Physicians Association.

Kathy Connelly, CPN Executive Director, stresses that HMOs are Health *Maintenance* Organizations, not Health *Management* Organizations. Connelly believes that managed care is a bad name, in that some managed care organizations are doing too little in the way of tending to patients' needs.

"Managed care should mean face-to-face contact between a doctor and a patient. That's the only time when health care is being truly managed."

Connelly is proud of the fact that CPN is also physician-owned and governed. She believes that managed care has almost become entirely insurance driven, where the focus has become managing money rather than care.

"There is great danger in a publicly-held stock company making life and death decisions based on costs. Money needs to go to the care of patients, not someone's stock investment."

Dean Health Plan, Inc.

Dean Health, another large physician-led organization which started in 1983, has attracted doctors who also feel their organization places more focus on the care of a patient, rather than the costs.

Dr Susan Isensee, a primary care physician and Dean's assistant medical director, has been with Dean Health for the last ten years. She joined Dean Health because she saw them as a strong clinical group, providing good medicine.

From a business standpoint, Isensee viewed Dean Health as a major player -- a very mature, very strong organization. Perhaps more importantly, she doesn't feel the pressure to meet the business-type goal of constantly shooting for profits. She feels this way because doctors partially own the company.

Susan Isensee, MD

The goal of Dean Health, according to Dr Isensee, is to provide the best possible medical care at the most responsive costs. Isensee feels this can be done because as owners and practitioners, the physicians can actually see where the money is needed and where it will ultimately go.❖

Professionalism in Health Care Delivery

Bioethics Committee, Milwaukee Academy of Medicine, Robyn Shapiro, JD, Chair

Introduction

Many of the rapid changes in health care today are being fueled by the fusion of medicine and business. While the two are not mutually exclusive, the danger is the potential for innovations that make bookkeeping sense but that threaten the best interests of patients. It is important for physicians to keep sight of their professionalism in setting the course and application of today's changes so that the core of medicine remains science, its clinical application and ethics. This paper discusses several changes that impact on the practice of medicine and demand resolution by reference to "professionalism."

I. Managed Care: New ethical issues confronting physicians

Appropriate concern about rising health care costs and unequal access to health care have prompted the growth of managed care systems. While market and bureaucratic methodologies may reduce costs and regulate performance, there is growing concern that physicians will be pressured into an approach to medicine that may be in neither the patient's nor the profession's best interests.

All agree that optimal health care is provided in a climate of trust between the physician and the patient. Trust requires that patients feel confident that physicians are serving as their advocates and promoting their interests. Traditionally, the physician has been the advocate for the patient. Today, managed care strains the physician-patient trust relationship, in a number of ways.

First, under a managed care system, the physician may find him or herself in a conflict of interest with regard to the patient's needs and the financial aspirations of the managed care system. It is argued that various managed care arrangements erode trust by creating both financial and non-financial incentives for physicians to contain costs by limiting beneficial patient care. Non-monetary inducements to limit care take the form of bringing peer pressure, or pressure from superiors, to bear on those who fail to take into account the financial well being of their employer.[1] Physicians then may begin to regard one another antagonistically, view their services as commodities produced for the purpose of selling, and see their patients as "consumers."[2] To guard against these adverse changes in the doctor/patient relationship, it should be the obligation of the managed care system that makes the decisions regarding limitation of care to clearly inform the patient, in advance, of the constraints it has placed on physicians and on treatments available to patients. It is neither fair nor appropriate to expect physicians working in a managed care system to defend decisions which they do not make.

Another objection to managed care is that it constrains patients' freedom to choose providers and obtain the medical services they desire. Financial penalties make it difficult for patients to seek care from providers who do not belong to their plan or to see specialists without the "permission/referral" of the primary care physician. A 1993 study reported that 64% of patients in traditional fee for service practices rated their care excellent overall, but only 49% of HMO patients did.[3] The literature documents that HMO patients frequently believe that their physicians are less responsive to their needs than are fee-for-service doctors.[4] In addition, in the 1993 study, waiting times for appointments and telephone access were rated worse in HMOs than in any of the other practice settings investigated.

It is also feared that managed care will intrude upon physicians' clinical judgment, which in turn will prove detrimental to patients. Pre-authorization requirements, negotiating the bureaucracy, and restrictions on the choices of diagnostic tests, procedures, hospitals, and pharmaceuticals all constrain physician autonomy and limit the time available for the actual study and practice of medicine. Physicians already shoulder a heavy responsibility to practice medicine efficiently and compassionately in a stressful environment. Each new constraint on the physician's autonomy further weakens the profession and ultimately the patients they serve. There is an urgent need to find the right balance between regulating medical practice so as to assure accountability while maintaining physician autonomy essential to the doctor/patient relationship.

Another restriction on physicians' autonomy may come with greater use of guidelines, protocols, standards of care and audits in the managed care environment. Certainly, such efforts are designed to improve quality of care; and there is no doubt that both providers and payers of medical care need better studies to define quality of care and cost effectiveness. But there is danger that such guidelines will limit the practitioner's freedom to practice medicine based on the needs of the given patient. All too commonly, patients do not present with classical textbook symptoms and therefore will not neatly fit into protocols. Reducing patient care to a set of algorithms and cookbook medicine in the long run may benefit neither the patient nor the profession. (For further discussion of the impact of clinical practice guidelines, please see section II).

Strains on the patient/physician trust relationship are also posed by increased utilization of allied health professionals in managed care. Many HMOs are, in fact, making greater use of allied health care workers, rather than physicians, to deliver medical care. While most

nurse clinicians and physicians' assistants provide high quality medical care, there exists the danger that diagnoses will be missed and that referrals to physicians will be delayed, to the obvious detriment of the patient.

Finally, with respect to certain groups of individuals, managed care may impede the very formation of the doctor/patient relationship. In their efforts to economize and to maximize profits, many managed care organizations avoid high-risl; and seriously ill patients altogether.

In summary, while many claim that managed care holds out the best hope for achieving society's twin goals of decreasing health care costs while increasing health care access, there are numerous concerns that managed care will have a potential adverse impact on the physician/patient relationship and on the ethics of the medical profession.

Recommendations

Before contracting to serve as a provider with a managed care organization, the physician should ensure that:

1. the managed care organization clearly and consistently informs patients, in advance, of constraints placed on available tests, treatments and specialists;
2. he/she will have sumcient autonomy to practice medicine in a manner that accords with his/her professional standards (e.g. he/she will have sufficient latitude to order tests and treatments and access specialty consultations);
3. practice guidelines utilized by the organization will be used flexibly so as not to limit physicians' freedom to practice medicine based on the needs of their individual patients; and
4. the services of allied health professionals will be appropriately utilized (i.e. within the scope of their training. licensure, and expertise), supervised, and evaluated.

II. Impact of clinical guidelines

The profession of medicine has long set standards for clinical practice on the ever-expanding body of scientific knowledge as advanced by, clinical and laboratory research. The profession also has allowed for a certain amount of variability in practice (sometimes referred to as the "art" of medicine) because of the inherent diversity encountered in thc spectrum of clinical situations, and because of the nature and experience of different practitioners and unique patients. With the rising importance of technology in medicine and the resultant escalation of health care costs, guidelines for clinical practice can be helpful adjuncts for the practitioner in making clinical judgements if they are cost effective and reasonably maximize patient benefit

For clinical practice guidelines to be useful, accepted and successful, they must be clear, straightforward and concise. They must be arrived at by scientifically legitimate means, based on a systematic and exhaustive review of the extant literature. Moreover, clinical practice guidelines must identify the statistical basis for the recommendations as well as the value judgements used in determining clinical efficacy and cost effectiveness.

Once drafted, clinical practice guidelines must be externally reviewed and accepted by others with expertise in clinical medicine. After adoption, they must be updated on a periodic basis to keep pace with the changing science of medicine.

Clinical practice guidelines should be just that -- guidelines rather than requirements. They should allow for a certain amount of variability, based on unique clinical circumstances. They must not be used as a standard of care in a malpractice proceeding without expert clinical opinion. They should have as their goal maximal reasonable patient benefit at minimum reasonable cost.

It has been said that at their best, clinical practice guidelines express one of the noblest aims of medicine: the continuing search for the best way to serve patients. At their worst, they can become a mindless straightjacket of outdated recipes enforced by those without clinical expertise. Physicians must make sure that clinical practice guidelines reach the higher goal.

Recommendations

Physicians should ensure that practice guidelines used in clinical practice are:

1. clear and concise;
2. arrived at by scientifically legitimate means based on systematic and exhaustive review of the extant literature;
3. explicit as to value judgments used in determining clinical efficiency and cost effectiveness;
4. externally reviewed;
5. widely accepted by professional medical organizations;
6. updated on a periodic basis; and
7. flexible, so as to allow for variability based on unique clinical circumstances.

III. Changing Relationships Between Physicians and Among Physicians and Other Healthcare Professionals

To some extent, relationships between physicians in the U.S. have always been contentious. Lively competition in philosophical, scientific and economic spheres is well documented. Our diverse cultural backgrounds and varied medical education have contributed to the conflict. In the past several years, mistrust between physicians has been exacerbated by widely publicized episodes of dishonesty in medical research. Moreover, the development of successful but costly new services, procedures and specialties has served to furthe fragment relations among physicians. Most recently, relationships between specialists and primary care physician have been strained by the gatekeeper role assumed by generalists in many managed care systems.

One consequence of fragmentation between generalist and subspecialist physicians is enhanced use of ancillary health care professionals, such as physician extenders, by sub-specialists to handle many of the activities of a generalist. Recently, the authority of

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physician extenders and other health care workers, such as nurse practitioners, physician assistants, nurse-midwives and physical therapists, has been broadened by many governing and licensing bodies. Studies indicating that lesser-trained personnel can indeed provide easier access to some medical services at less cost than a physician are convincing.[5] However, enhanced use of allied health personnel also raises concerns.

One concern is that collaborative practice can become unnecessarily complicated. Also, the physician member, required to supervise and promote effective collaboration among the other team members, must take on a significant extra burden of responsibility. Lines of legal and moral responsibility for medical decisionmaking may also blur (although ideally, if any difference of opinion within the team occurs, the authority should reside with the individual having the "greatest degree of professional competence").[6]

Another strain in relationships between physicians has occurred because of fiscal control roles assumed b, some physicians. There now exists a new hierarchy of medically-trained but often nonpracticing physicians who function in administrative roles for health care payers. It is difficult for the physician to profess a primary allegiance to the patient in this setting, which engenders battles over patient rights to medical care versus costeffectiveness.

Recommendations

In order to maintain professionalism in continuously changing relationships with other health care providers, the physician should:

1. promote effective collaboration between and among other members of the health care team;
2. retain responsibility for overall supervision of his/her patient's care;
3. maintain the patient's best interests as his/her highest priority; and
4. prevent third party interests from adversely influencing his/her relationships with other physicians and other health care providers.

IV. Changing Relationships Between Physicians and Healthcare Institutions

With consolidation and acquisition of health care entities and enhanced competition for patients, the traditional supportive relationship between physicians and healthcare institutions has evolved to a more competitive relationship. Historically the physician controlled the flow of patients to the healthcare institutions. With the advent of managed care and contractual relationships between payors and healthcare institutions, in some instances there is now an underlying "turf battle" between the physicians and the healthcare institutions for "ownership" and "management" of the patient. In addition, under many managed care arrangements, physician income is inversely related to resources utilized. This fact alone has catalyzed "economic credentialing," which has the potential for creating schism between physicians and institutions, and in some instances, ethical conflicts.

Recommendations

In his/her evolving relationships with health care institutions, the physician's primary role must continue to be patient advisor and advocate. To ensure that patient advocacy remains the physician's primary role, managed care systems and health care institutions that participate in those systems should provide avenues for the physician to question utilization review determinations which could harm his/her patient's well being.

V. The Changing Doctor/Patient Relationship

Throughout history the encounter between healer and supplicant has been molded by social, political, legal, and economic forces. For most of this century, physicians have enjoyed a position characterized by respect and trust, largely engendered by the growth of scientific knowledge and the physician's increasing utilization of science as the basis of medical practice.[7] Until the late 1970's the physician-patient relationship was a paternalistic one, in which most of the power was delegated to the physician. With the rise of consumerism in the 1 980's the relationship became one of accommodation, in which the autonomy of the patient was increasingly recognized; communication, discussion and negotiation were more widely practiced than previously,[8] and the course of medical care was determined by medical indications along with the preferences of the patient.

At the present time most patients seem to have confidence in their own physician, but have less confidence in the medical profession in general. A recent poll revealed that more than 50% of respondents think that doctors care less about patients than they did in the past.[9] The cause of this apparent loss of patient trust in the ability and the inclination of the physician to provide optimal, successful care is likely multifactorial.

One reason for declining patient trust in physicians may be unreasonably high expectations. It is a well known concept in social psychology that emotional discomfort results when there is a discrepancy between expectations and reality. The enormous emphasis on modern technological successes, which along with great leaps in scientific understanding enabled physicians to attain a position of authority among professionals, has produced incredibly high expectations of success in medical care.'[10] The failure of physicians to prevent, eliminate or control all disease is seen as just that -- a failure -- because the expectation is that success is always possible.

A second factor contributing to declining trust in the medical profession may be the patient's greater reliance on other individuals and other sources of medical information. In the past, special knowledge and expertise held by the physician, which was usually unavailable to laypersons, and the long-term and all-encompassing relationship between the patient and his or her physician helped to keep

the physician in an authoritative position. The recent widespread availability of health information through the media and the Internet; the rise of consumerism which encourages questioning of all sources of information; and the move toward utilization of multiple specialist health care providers, with whom patients often do not have a well-developed relationship, have all contributed to thc erosion in the trust that patients place in the ability ofthe physician to provide optimal care.

Moreover, within the past ten years physicians have been encouraged, often required, to consider factors other than strictly medical indications and the wishes of patients and their families, in making medical decisions. With higher and higher costs of highly technical procedures, decision-making authority has migrated away from the ph! sician or physician-patient relationship, to the third party payor, evoking legitimate questions about the physician's allegiance.

Producing good, with respect to health care; protecting individual freedom; and maintaining justice are the goals of the practice of medicine.[11] In all of these, the recipients of the good, the freedom, and the justice, have traditionally been patients. At present, a third party, the payor, is demanding the loyalty ofthe physician, and the payor's goals are often at odds with those of the patient.[12] For example, some health care organizations require a physician employee to see a pre-determined (and excessive) number of patients each day, thereby limiting physician-patient contact time. This practice not only contributes to patient dissatisfaction, it can also limit the ability of the physician to provide thorough and appropriate care. It is not surprising that patients have questions regarding the making of medical decisions. Patients might wonder whether the allegiance to the payor, manifested by less inclination to treat aggressively, or use of less expensive and perhaps less optimal medications, or reliance on outpatient rather than inpatient treatment, is greater than allegiance to the patient.

In summary, recognition by patients of the ever-expanding capability of high-tech medical care to achieve miraculous cures has greatly increased, perhaps to an unrealistic level, the expectation that physicians will be able to cure all illnesses. Confrontation with the reality that this is not possible causes anxiety and doubts of competency. The change in medical practice, from reliance on a single, personally known physician, to utilization of multiple sub-specialists, has injected another source of anxiety and potential for mistrust and misunderstanding. The high cost of sophisticated care which often is attributed to the physician's services alone, rather than to the entire package of lab, hospital, diagnostic center, and pharmacy contributions to the total bill, adversely affects the perceived nature of the physician's motives. Finally, the decreased ability of the physician to provide the same degree of access to care that was previously experienced by patients lends another opportunity for patients to question the capability and/or the dedication of the physician.

To some extent, society must be involved in redressing the current problems in the doctor/patient relationship. Determination of realistic health care goals, priorization of health care interventions, and allocation of resources, must be delegated to the general public, Mther than being dictated by either physicians or third party payors. Society must make decisions regarding definition of futility, quality of life, and what degree of efficacy is sufficient to allow use of a particular treatment modality.

For their part, physicians must not agree to ration on an individual basis; to do so is to abdicate their role as patient advocate, and to violate the trust of the patient. Physicians must also acknowledge the limits of medical practice and scientific knowledge, and embrace a partnership role in improving health, rather than a paternalistic role as the (inherently unsuccessful) guarantor of health. Finally, education of, and communication among, providers, consumers, and administrators of health care are necessary to ensure that expectations of health care are realistic, that allocation decisions reflect a consensus of public will, and that individual freedom is protected to the extent possible within the constraints of available resources.

Recommendations

To protect and enhance the doctor/patient relationship, the physician should:

1. help educate his/her patients regarding their conditions and realistic goals of indicated medical care;
2. facilitate consistent and collaborative communication with his/her patients by all members of the health care team;
3. reassure his/her patient that his/her primary allegiance is to the patient's well-being;
4. avoid being placed in a position in which he or she must ration care on an individual patient basis; and
5. avoid contracts which place arbitrary and inappropriate limits on the resources, including time, that can be allocated to each patient.

References

1. Jecker, Managed Competition and Managed Care, *Clinical Ethics*, Vol. 10, No. 3, August 1994, 527-540.
2. Emnauel E. J., Four Models of the Physician Patient Relationship, *JAMA* 267:2221-2226. 1992.
3. Rubin, H.R. et al, Patients Ratings of Outpatient Visits in Different Practice Settings, *JAMA* 270:835-840, 1993.
4. Mechanic CD Cost Contained from the Quality of Medical Care, Rationing Strategies in an Era of Constrained Resources, *Milbank Mem Fund Q*, 1985; 63:453-75.
5. Mundinger, M Advanced-Practice Nursing-Good Medicine for Physicians? *NEJM* Jan 20, 1994; 330:211-214
6. Mundinger, M Advanced-Practice Nursing-Good Medicine for Physicians? *NEJM* Jan 20, 1994; 330:211-214
7. Starr *The Social Transformation of American Medicine*, 1982
8. Siegler (Mayo CL. Proc)
9. Starr *The Social Transformation of AmQrican Medicine*, 1982
10. Monagle (Ed) *Medical Ethics*, 1988
11. Mappes *Biomedical Ethics*, McGraw-Hill, 1986
12. McCullough (*Mt. Sin Journ Med*)❖

Managed Care Can Be Better Care For All Citizens: A Primary Care Perspective

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MANAGED HEALTH CARE is frequently viewed with suspicion by employers, payers and patients. Admittedly, at the extreme, there are opportunities for the delivery of less health care to lead to profit for organizations or individuals. An alternative view of managed care, however, is that judicious, cautious use of the current health care dollar can potentially deliver better service to potentially more patients.

Many managed care organizations monitor health care expenses by identifying the sentinel event of a primary care physician asking for a consultation, which initiates a prior authorization process. A central question for managed care is, "Who should make this 'authorization' decision?" Should this decision belong to persons **not** involved in clinical care, or should it be shared with the practitioners who know their patients best?

Payers who acknowledge, reimburse and involve physicians in development of the authorization criteria will find physicians less suspicious of the "prior authorization" process. Further, if this process assists in the coordination of a patient's care, primary care doctors would become partners in the development and implementation of the best standards for the use of expensive components of health care.

This paper consists of two parts: The first part addresses several opportunities to improve care for patients. The second part describes a vehicle to achieve some of these goals, a group of over 400 primary care doctors in the Southern Wisconsin called the Community Physicians Network (CPN).

Opportunities to improve care for patients

Primary care physicians have identified three categories for potential improvement in the delivery of care. These include enhanced access of patients to primary care doctors with consequent improvement in patient satisfaction; enriched communication and collaboration with our specialist colleagues; and a revisited attempt to deliver as much care as is reasonable in the patient's town.

Improved access to primary care physicians leads to improved patient satisfaction: the economic reality

Patient satisfaction is substantially related to the time between the request for an appointment and the date of the appointment; and the time waiting in the waiting room. While the wait time in the specialist's office might be long, the average patient is frustrated about how long it takes to see the practitioner they see most, their primary care doctor. There are more primary care physicians as a single group and they deliver more office and telephone contacts than any other physician type. Therefore, dissatisfaction with wait times is largely a primary care concern.

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Wait times, we believe, are related to increases in primary care overhead. Since the late 1980s, many independent primary care practices have experienced increases in the cost of practice that have not been balanced by increases in reimbursement to their businesses. Many practices, therefore, are unable to hire more staff to answer the phone, triage patients in our offices, and perform the patient teaching necessary to assure real compliance. Without the appropriate personnel, patient satisfaction is predictably diminished.

The overhead-reimbursement imbalance is especially worsened by, but does not compromise, the care of the uninsured. Not being reimbursed for some care displaces the responsibility for the salaries of nurses and office personnel to others who can pay; or, additional staff

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is not hired to care for the additional patients and wait times for all patients are longer.

Telephone access will become increasingly important. "Call A Nurse" telephone access to nursing advice, either in local clinics or as a vended service to clinics, will ultimately provide some triage relief for primary care patients and doctors. Telephone access has been especially important to non-physician professionals working in the home care of patients. Ultimately, reimbursement mechanisms need to support telephone access to primary care advice. The Medicare oversight fee is an attempt, but it is administratively awkward, even functionally prohibitive, for many practitioners.

Patients should also increasingly access primary care following a notice prompting them to seek care for preventive services, similar to teeth cleaning reminders, veterinarian shot reminders and the doctor's bill reminding of obligation for payment.

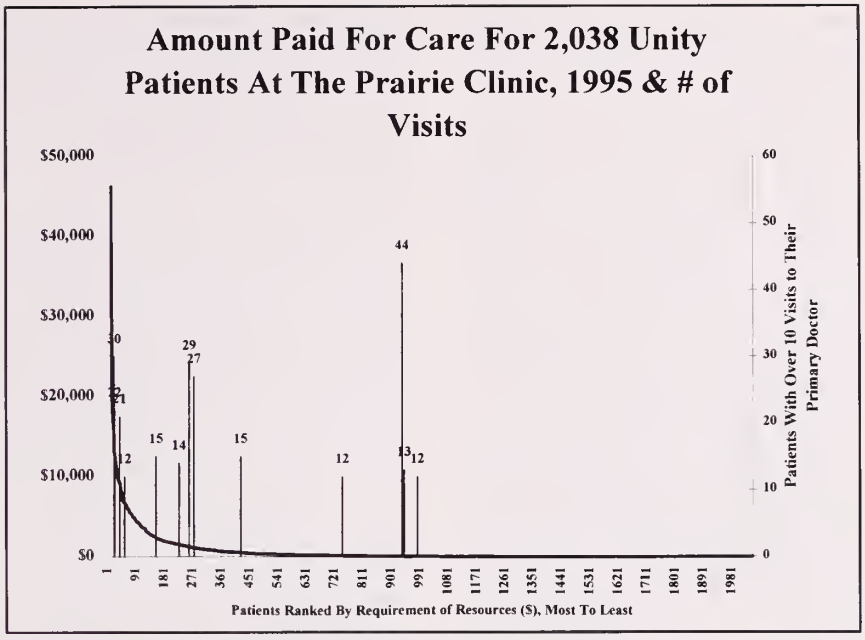

Figure: In the author's clinic, 2,038 patients declared this clinic their primary care provider. The patients were then sorted by the amount of resources spent on their care. Patients having 10 or more visits were plotted also. One patient, for whom the clinic was capitated, visited this clinic 44 times, was number 944 in the expense ranking out of these 2,038 patients, and then appeared to contribute very little to total expense. Even if the insurer had reimbursed the practice as if a fee-for-service patient, the bill for the clinic visits would only have been about $2,000, which would have shifted the patient only slightly higher in the expense ranking. For those patients not presenting for care who have little to no expense, primary care givers still have an obligation to prompt them to present for preventive medicine, not uniformly accomplished at this time.

Attempts to address economic reality: physicians seeking partners who defend the patient's right to choose the site of specialty or tertiary care

Some practices seeking an answer to escalating overhead have affiliated with a tertiary care center or with a predominantly specialist medical group, or a hybrid structure. Tertiary care centers or specialist medical groups have sufficient economic resources from their hospital or specialist billings to exchange for the promise of more referred patients from primary care doctors.

Affiliation can serve the people of a rural location if equity commensurate with the value of the referral stream is in some fashion returned to the community; and if the patient's practitioner is not given incentives to refer to the sponsoring system. While this is not currently a concern, the citizen's preference for location of tertiary care needs to be guaranteed even if their primary care physician actually owns stock in a different tertiary care system. It is difficult to monitor for this potential effect on patient choice.

As an alternative to affiliation, oppressive primary care overhead could be countered by increased reimbursement to primary care clinics to allow reinvestment in the provision of local care. Primary care practices would need to agree to meet access and other quality standards and not to use increased reimbursement for disposable income.

Each primary care doctor in a rural Southern Wisconsin has about $750,000 annual impact on their local hospital and $750,000 annual impact on tertiary care centers. Surely, several hundred primary care givers each with $1.5 million in hospital charge impact can contribute to the discussion about how to assure that their patients have access to their primary care services.

Improved communication and collaboration between primary care doctors and specialist colleagues

Too often patients receive consultation without the authorizing physician clarifying the clinical question. Transfer to the specialist of laboratory findings, x-rays, collateral consultations, etc., sadly may also not occur. Redundant studies may need to be acquired or precious staff and physician time

may be used to unify this database instead of focusing on the care of the patient. The patient then too often returns with a treatment strategy that does not involve the primary care doctor in helping the patient make choices among equally suitable plans; given the opportunity, the primary care physician can often individualize a plan of care to best accommodate the patient's social setting and available local resources.

The impact of this pattern of communication results in patient frustration, in the delivery of uncoordinated care, in frustration between physicians, and in added expense which misdirects resources away form the care of the patient.

The ability to instantaneously send information electronically can avoid delays in medical records transfers and can avoid delays in receiving the summary specialist opinion rendered back to the primary care provider. Such information transmission will require an electronic communications infrastructure that communicates easily between dissimilar users. While capital expenditures for such a system are significant, thoughtful allocation of health care resources could fund this investment.

Collaboration between specialists and primary care doctors is needed in at least two types of clinical circumstances. First, diagnoses should be identified for which expedient referral to specialty care may enhance patient care. Second, other conditions may be diagnosed, treated and monitored more cost effectively in primary care; care may be enhanced in this circumstance by consultants supporting the continuing education of primary care physicians.

Keeping care close to home

The cost of tertiary care will necessarily be expensive, but resources that are spent away from rural environments where these patients live negatively impacts many their community. Local provision of care provides local jobs and injects into the local economy disposable income that supports local businesses.

Moreover, for rural residents, care delivered away from their town often requires the family to travel, in addition to the patient. But where sufficient resources exist locally, a renewed attempt to keep the care "close to home" must be engaged. Locally provided services are important to our rural elders, who utilize large health care resources, who will often decline care offered only in an urban area, and whose homes are often remotely located. Aggressive nursing case-management of patients with intense health care needs can lead to an important coordination of care, enhancing quality and cost effectiveness, and may often involve care in several different settings near the patients home.

A potential vehicle for making a voice for the primary care of citizens

The emergence of organized medicine in Southern Wisconsin

State, County and Madison municipal purchasers of health insurance committed in the early 1980s to better coordinated medical care and consequently encouraged the formation of Health Maintenance Organizations. Madison-based medical groups, through the insurance companies they owned, made a voice for the urban health care needs within Madison. Meanwhile, the rural primary care clinics were hired by contract by Madison insurers. These clinics supply far in excess of 50% of the referral stream to these medical groups, but have no governance within these insurers in deciding how to spend the available health care dollars.

Recognizing the need for a voice for rural health care, the Rural Wisconsin **Hospital** Cooperative, now the Rural Wisconsin **Health** Cooperative, championed the genesis of a separate insurer, the HMO-Wisconsin. The evolving group made an important strategic decision: whereas other Madison-based HMOs hired by contract rural doctors individually or by clinic, the HMO-WI chose to contract with one independent provider association. Initially this association was named the Rural Physicians Association (RPA), but in 1993 it was renamed the Community Physicians Network (CPN); this contract was predicted to encourage sufficient organization among independent primary care providers to accept and monitor this contract.

Also importantly, this provider group agreed initially to contract only with the HMO-WI or its designate, now Unity Health Plans Insurance Corporation. The relationship was crafted with withholds from provider reimbursement that would be returned if the same or better quality care was delivered for a responsible price. Dramatically, by mutual agreement on September 10, 1996, the CPN would no longer be restricted to exclusivity with Unity, but would be able to accept contracts to deliver care to other insurers; simultaneously, the CPN would decide how best to allocate the health care dollars for the old HMO-WI membership, now the Unity "Community Network."

From its inception, the over 400 rural and urban primary care givers of the CPN did not emerge into the voice of rural care in the South of Wisconsin for several reasons. The HMO-WI remained a small part of each rural caregivers practice. Consequently, the potential recovery of relatively small withhold dollars was not worth the substantial effort by already busy physicians. Further, despite the committed efforts of several, the IPA lacked the critical mass of

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leadership necessary to effectively organize and make a voice for rural care; that is, until recently.

Having accepted responsibility for managing a portion of the dollars spent in the care of our patients, the CPN makes several observations that may be generalized to other of our patients.

1. The delivery of all of the primary care services is approximately 15% of the health care dollar.
2. Nearly as much resource is spent on the medication authorized each day as on primary care delivery; pharmacy savings can be dramatic if therapeutically-equivalent generic medications are chosen.
3. The inpatient facility charge alone is over 25% of the health care dollar for the relatively few patients who use these services.
4. Within Unity, 2% of the old HMO-WI membership lived in Madison in 1995, in excess of one-quarter of all reimbursements for these members were made for care delivered in Madison. Opportunities likely exist for collaboration with our urban partners to identify patients who could receive their services locally or be returned to the community earlier in an episode of care.
5. National benchmarks (Milliman and Robertson) for admissions per 1,000 patients insured indicate that the rate of admission in the Unity Community Network is roughly 40% higher for medical admissions and 25% higher for surgical admissions than a "moderately well managed system." Only with the collaboration of primary care providers and specialists in recommending equal or better care alternatives will improvement toward these benchmarks be made.
6. Differences in the cost of care for patients appears to be related less to the community's average age of patient population than it is related to the community resource utilization pattern, although further analysis to isolate potential confounding influences is underway. The CPN is identifying opportunities for improving cost at the same or better quality, specific to each group of primary care providers within a community. We believe colleague primary care doctors have greater credibility than non-physicians or non-primary care providers in discussing opportunities requiring subtle modification in practice patterns.

Summary

The CPN seeks to enhance the care of patients by judicious expenditure of health care dollars, currently for the Unity "Community" Network, but ultimately also for other insurers who would enter risk-sharing relationships with the CPN. Improvements in health care delivery will be made in enhanced access to primary care, including telephone access to nurse triage; in collaboration and communication between the selected consultant and the referring primary care giver, including an electronic network allowing for selected information sharing; and in renewing medicine's collective commitment to care provided as close to home as possible, or in the home if this is the highest quality.

The care of the uninsured remains a challenge and a moral obligation from which the CPN does not shrink. The economic realities of primary care delivery must be improved, with additional resources allocated being substantially rededicated to patient care. The patient's control of the selection of the site of health care and the absence of incentives to their primary care provider for a referral pattern different than the patient's choice will remain important to the CPN. The CPN hopes to provide the diplomacy between third party payers to enhance collaboration and minimize competition in the delivery of care in communities.❖

Improving the Cost-to-Benefit Ratio of In-Vitro Fertilization

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Abstract
In-vitro fertilization (IVF) has been criticized for being too costly to permit ready access to needy patients, either through their own funds or through those of third party providers. European groups have managed to offer these procedures at a fraction of the cost incurred by their United States counterparts by streamlining their protocols. Accordingly, we present our methods for reducing the cost of IVF. The main modification was made by performing the IVF procedures in the clinic under IM analgesia, avoiding the costs of a surgery suite and anesthesia. In addition, donor oocyte, micromanipulation, and cryopreservation services were not offered, reducing overall personnel and equipment costs. Overall costs were reduced from customary levels of $7,000--$11,000 in the United States to $3,409 per cycle initiated, while maintaining good ongoing/delivered pregnancy rates (30.0% versus 18.6% nationally) per cycle reaching aspiration. We conclude that, through the elimination of less necessary and/or utilized procedures, IVF may be performed in a more cost-effective manner while maintaining good success rates. For the patients who desire IVF services not offered under such a system, referral to a more specialized IVF center is appropriate.

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Introduction

Although some states have mandated insurance coverage for in-vitro fertilization (IVF) procedures, the majority of third party providers not affected by such laws do not cover IVF.[1] This has been explained by defining infertility as a social issue rather than as a medical illness of priority concern; because infertility is not life-threatening, treatment is considered elective.[1] Since most patients undergoing IVF procedures carry medical diagnoses (e.g., chronic pelvic inflammatory disease, endometriosis) which are usually covered by insurers, it is reasonable to conclude that fear over incurring large claims is another reason for the caution insurers have in covering IVF procedures.

A number of European programs have managed to offer IVF at prices considerably lower than that of US programs by employing cost-reducing techniques.[2] In order to make IVF coverage more attractive to insurers and more accessible to our rural patients, we have streamlined our procedures and reduced the cost of an IVF cycle while maintaining good success rates. Accordingly, we present our methods and results.

Materials and Methods

From January 1995 - June 1996, 36 IVF cycles were initiated in 32 patients; indications for IVF included tubal factor infertility, ovarian dysfunction, endometriosis, and male factor infertility. All couples were screened for infectious diseases with a hepatitis panel, HIV serology, and VDRL.

Down-regulation of the pituitary and superovulation was accomplished in 34 cases with leuprolide acetate (Lupron, Tap, Chicago IL), and gonadotropins given in a flare fashion beginning in the follicular phase. In one patient with polycystic ovarian syndrome, two months of pituitary

down-regulation was given prior to initiating gonadotropins; a combination of clomiphene citrate and gonadotropins was used for ovarian stimulation without down regulation for one case in which the patient had previously conceived with that regimen.

Follicular development was monitored via transvaginal ultrasound and serum estradiol levels. If the follicular response was poor, the cycle was cancelled; if follicles were of adequate size (mean diameter 18 mm), patients were given 10,000 IU of human chorionic gonadotropin IM. The IVF aspiration was then performed 35- to 36-hours later.

One day prior to the aspiration, culture medium consisting of Human Tubal Fluid (Irvine Scientific, Irvine CA) supplemented with 10% Synthetic Serum (Irvine Scientific, Irvine CA), was equilibrated; this took place in the IVF incubator, a humidified 37 degrees Centigrade, 5% CO_2, 5% O_2 environment. One hour prior to the aspiration, organ culture dishes (Falcon #3037, Becton Dickinson Labware, Lincoln Park NJ) were prepared. One ml of equilibrated culture medium was placed in the well and three ml of the same medium were added to the moat.

Prior to oocyte aspiration, patients were administered meperidine, 100 mg, and hydroxyzine, 50 mg IM. Vital signs were monitored by a nurse throughout the procedure. The vulva and vagina were washed with an iodophore antiseptic, 5-10mL of 1% xylocame was placed locally, and the area was rinsed with sterile water. A 17-gauge double lumen needle was used for transvaginal ultrasound-guided aspiration and dushing of the follicles. Radio communication was used between the aspirating physician and the technician performing the egg search. The embryo culture laboratory is located between the ultrasound suite and the transfer room, with windows connecting the three areas for passage of materials during procedures.

Table 1: Mean Patient Variables, January 1995 -- June 1996

	January 1995 - July 1996
Age	32.4
Parity	0.8
Years Infertility	6.6
Male Factor	5
Age >39	0
Number of Embryos Transferred	3.0
Clinical Pregnancies per Aspiration	37.0%
Ongoing/Delivered Pregnancies per Aspiration	30.0%

During the aspiration, oocytes were identified using a Nikon SMZ-U dissecting microscope (Nikon Inc., Garden City NY) inside a modified humidified infant isolette, with a 5% CO_2 atmosphere at 37 degrees Centigrade. Once identified, the oocyte was washed in culture medium, transferred to an equilibrated organ culture dish, and placed immediately in the IVF incubator.

A semen sample was collected during the aspiration. Sample preparation began within one hour of collection, using a double wash and double swim-up technique. During the wash phase, the sample was spun at 280 g's. The insemination was done four to six hours after the aspiration. 50,000 to 500,000 progressive sperm were used per oocyte, depending on the results of the sperm morphology assessment. Up to six oocytes were inseminated depending on the patient's age, and all of the resulting embryos were transferred. The oocytes were checked for fertilization 15 to 19 hours following the insemination.

Embryo transfer was performed the day following the fertilization check. The patients were premedicated with 50 mg progesterone IM and 5-10 mg valium orally. A prerinsed TDT set catheter (CCD International, Natick MA) was loaded with embryos in 30 to 80 μl of culture media, cushioned by 10 μl each of culture medium and air on either side of the embryo column. For transfer, patients were placed in the dorsal lithotomy position after cleansing the cervix with human tubal fluid medium. The catheter was placed in the uterus, 0.5 cm from the tip of the fundus. Patients remained supine for two to three hours following transfer, and the luteal phase was supported with progesterone.

Fees included in the cost analysis were the precycle visit and discussion, medications, estradiol levels, sonogram visits, oocyte aspiration, gamete culturing, embryo transfer, and a quantitative hCG pregnancy test. Costs incurred as a result of complications such as ovarian hyperstimulation were also included. Clinical pregnancy was defined as at least one gestational sac visible via ultrasound; costs incurred after this point were not included in the study. Precycle lab tests were also not included in this report, as many patients had chosen to run the tests at other hospitals or had recent results available. The cost for all precycle labs (HIV, hepatitis panel, VDRL, rubella, Pap, and semen analysis) was $435 in 1995 and $455 in 1996 if performed at our clinic. Mean costs

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Table 2: Cost Analysis of IVF, January 19 -- June 1996

	Number of Cycles	Mean Cost per Cycle ± Standard Error of the Mean	Ongoing/ Delivered Pregnancies	Mean Cost per Ongoing/ Delivered Pregnancy	Total Cost of All Cycles
Cycles Initiated	36	$3,409 + $1,192	9	$13,638	$122,739
Cycles Reaching Aspiration	30	$3,770 ± $828	9	$12,608	$113,471

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per ongoing/delivered pregnancy were calculated using the number of patients who had ongoing, viable pregnancies by October 1996, in addition to those patients who had already delivered by that time.

Results

During the months of January 1995--June 1996, 36 IVF cycles were initiated. Of these, four were canceled prior to oocyte aspiration for poor follicular development and one because a two cm endometrial polyp was noted on ultrasound. Two patients experienced spontaneous abortions following confirmation of a clinical pregnancy. There were nine ongoing/delivered pregnancies, with four singletons, four twins and one set of triplets. The triplet pregnancy delivered at a gestational age of 34 weeks. One baby of a set of twins has Down's syndrome. Seven patients have delivered and two patients have ongoing pregnancies in the third trimester as of October 1996. No ectopic pregnancies occurred. No patients required hospitalization for hyperstimulation or other complaints. Clinical variables and pregnancy rates for these patients are listed in Table 1. The mean cost of an IVF cycle was examined and the results are tabulated in Table 2.

Discussion

Recent reports have found the cost of an initial IVF cycle in the United States to range between $7,000 and $11,000 for all fees up to and including the embryo transfer.[3] The cost of an IVF cycle per delivered pregnancy is dependent upon a number of factors: an individual program's success rate, the patient's age, diagnosis, and number of treatments administered. While a program from the Netherlands found the average initial IVF cycle cost $1,250 with a rate of $12,500 per achieved full-term pregnancy,[2] a similar study from the United States reported an average of $44,200 per delivery.[3] Inclusion of costs incurred from neonatal complications, multiple births, and wages lost during treatment increased this figure to $66,667 dollars.[3] For a sixth cycle of treatment, the Dutch study reported an average of $19,000 per delivery,[2] while the corresponding United States amount was $ 114,286.[3] These estimates do not take into account patients with a lower chance of conception, such as those over 40 or with male-factor infertility. Figures such as these have led many third party providers to forgo purchasing in-vitro packages. For example, of 714 possible medical conditions, the need for assisted reproductive technologies was ranked 701st in importance by those involved in shaping the Oregon plan to extend Medicaid.[4]

Our IVF program is attended primarily by rural couples with modest incomes, for whom infertility services are a major financial concern. By streamlining the services offered in our program, we have been able to lower the cost of an IVF cycle without adversely affecting the success rate. The mean cost per initiated cycle for this study was S3,409; the ongoing/delivered pregnancy rate per IVF retrieval was 30.0%, a figure higher than the 18.6% percent for deliveries per retrieval reported by the Society for Assisted Reproductive Technology (SART) Registry in 1993.[5] This is the most recent value for all North American centers reporting to SART. This resulted in a total cost per ongoing/delivered pregnancy for all cycles initiated of $13,638, a figure comparable to that found in the Netherlands but one-third less than that previously reported for the United States.[2,3]

This cost reduction has been achieved by varying the protocol in several ways. A flare regimen has been adopted for ovarian stimulation; good pregnancy rates[6,7] and lower costs[8,9] have both been associated with this technique, which involves the administration of low dose leuprolide and gonadotropins during the

patient's follicular phase. The IVF aspirations are performed in the clinic under intramuscular analgesia, so that hospital and anesthesia charges are avoided. This is similar to the practices found in the Netherlands, where IVF is performed in a simplified setting.[2] Donor oocytes, micromanipulation techniques, and cryopreservation are not used, as they are expensive in terms of personnel, administration, and equipment costs. The approximately 5% of patients desiring these services are referred to programs which offer the corresponding service. Finally, higher than average success rates result in lowering the cost per ongoing/delivered pregnancy (see Tables 1 and 2).

Were third party providers to pay for IVF services, the cost of the benefit package would not increase dramatically. A study has reported that the additional cost per employee per year to fund IVF in 1995 would equal $2.79.[10] If IVF were available to all, it has been projected that each insured employee would experience an increase in premiums no greater than $15.69.[10] In Hawaii and Massachusetts, two states which currently mandate third party coverage of IVF services, only 0.1% of the total benefit package is consumed by these procedures.[1] Some third party payers have limited an individual's number of covered IVF cycles or total amount spent on IVF, to discourage overuse of available funds and keep premiums low.[1,11] These figures could be reduced still further by implementing limited yet successful IVF programs like the one previously described.

Although a study has shown that some Americans would be willing to pay $17,730 per cycle for a 10% chance of parenting a biological child,[12] few can actually afford that amount. Most may be willing to pay an additional $32 per year in insurance premiums to assure that IVF can be afforded by all[12]-- an amount twice as great as that needed to achieve this goal. The current study indicates that with streamlining of the protocol, cost can be reduced without decreasing the success rate. These changes may make IVF feasible for infertile patients and insurance companies alike.

References

1. Establishing priority for infertility services in health care reform. Washington, D.C.: American Fertility Society, Office of Government Relations, 1994.
2. Haan G: Effects and costs of in-vitro fertilization—again, let's be honest. *Int J Tech Assess Health Care* 1991; 7: 585-93.
3. Neumann PJ, Gharib SD, Weinstein MC: The cost of a successful delivery with in- vitro fertilization. *N Engl J Med* 1994; 331: 239-43.
4. Office of Technology Assessment. Evaluation of the Oregon Medicaid proposal. Washington, DC:US Government Printing Office, 1993.
5. Assisted reproductive technology in the United States and Canada: 1993 results generated from the American Society for Reproductive Medicine/Society for Assisted Reproductive Technology Registry. *Fertil Steril* 1995;64: 13-21.
6. Garcia JE, Padilla SL, Bayati J, et al: Follicular phase gonadotropin-releasing hormone agonist and human gonadotropins: a better alternative for ovulation induction in in vitro fertilization. *Fertil Steril* 1990; 53:302-5.
7. Toth TL, Awwad JT, Veeck LL, et al: Suppression and flare regimens of gonadotropin releasing hormone agonist: use in women with different basal gonadotropin values in an in vitro fertilization program. *J Reprod Med* 1996;41:321-6.
8. Acharya U, Small J, Randall J, et al: Prospective study of short and long regimens of gonadotropin-releasing hormone agonist in in vitro fertilization program. *Fertil Steril* 1992;57:815-8.
9. Scott RT, Navot D: Enhancement of ovarian responsiveness with microdoses of gonadotropin-releasing hormone agonist during ovulation induction for in vitro fertilization. *Fertil Steril* 1994;61:880-5.
10. Collins JA, Bustillo M, Visscher RD, et al: An estimate of the cost of in vitro fertilization services in the United States in 1995. *Fertil Steril* 1995;64:538-45.
11. Frankfurter D, DeCherney AH: Infertility treatment and the IVF patient in managed care settings. *Am J Man Care* 1996;2:691-6.
12. Neumann PJ, Johannesson M: The willingness to pay for in vitro fertilization: a pilot study using contingent valuation. *Med Care* 1994;32:686-99.❖

Professional Perceptions of Availability and Quality of Mental Health Services in Wisconsin

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Abstract

Eighty-six county coordinators and psychiatrists from predominantly rural counties reported their perceptions of availability and quality of 21 types of inpatient, outpatient, and transitional living services in Wisconsin for five target populations: adult, children, adolescent, geriatric, and minority. Their ratings and priorities for addressing needs indicated (a) that transitional living services are insufficient and of inadequate quality for all populations; (b) that availability and quality of inpatient and outpatient services are better for adults; (c) that general needs across all populations for additional and higher quality services are for services that address specialized problems, both inpatient and outpatient; (d) that children, adolescent, minority, and geriatric populations have limited access to needed services; (e) that available services for these four groups are most often inadequate; and (f) that the needs of children and adolescents should be given highest priority, particularly their needs for transitional services and inpatient and outpatient services for special problems. Actions and recommendations are discussed for professionals and advocates to increase awareness of needs for quality services for children and adolescents, for expanding public information, and for design of local-county quality programs, including professional education and continuing outreach to important constituencies and advocates.

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Introduction

The State of Wisconsin has been a pioneer in mental health services with notable leadership in devising urban models for community mental health support programs. Accessibility and quality of mental health services statewide, and in particular in rural areas, has been discussed informally among a number of Wisconsin Psychiatric Association (WPA) members over the last few years. In 1994, the WPA's Community Psychiatry Committee reviewed available literature regarding the delivery of mental health care and accessibility and quality of urban and rural programs for various patient populations. The literature was of limited value in providing guidance on issues of quality or access to services for various target populations.

The national literature suggested that delivery of mental health services for children and adolescents is wanting; however, no definitive data are available that depict mental health needs in rural and urban communities.[1] Emotionally disturbed children and youths are the most underserved disability population, as reported by the President's Commission on Mental Health in 1978.[2] Comparisons of inpatient mental health services in metropolitan and non-metropolitan communities suggest that metropolitan/urban areas have more and better services available and are able to attract staff with higher qualifications and training.[3]

Research reviews further suggested that studies of availability and distribution of quality services are deficient if they do not examine need on a multi-county basis or do not address mental health services that are becoming more widely available nationally as outpatient services and through residential or transitional care settings, as well as traditional inpatient psychiatric services. Finally, current comparative data on incidence, need, and public perceptions of services available or needed within Wisconsin counties were not found.

The WPA Community Psychiatry Committee therefore conducted a survey of clinicians to elicit statewide data on availability and quality among Wisconsin counties. In Wisconsin, Human Services Boards were established for each of the 72 counties with responsibility for coordinating mental health services, services for chemical dependency, and developmental disorder-related services, as well as for long-term funding for populations served through community-based facilities. Small and/or sparsely populated counties are often served by a single board. The researchers were charged to poll both

clinical practitioners (WPA member psychiatrists) and mental health coordinators in each county. The purposes of the study were to determine professional perceptions regarding general accessibility and quality of mental health services for five selected target populations and their recommendations and priorities for improving mental health services in Wisconsin.

Methodology

Questionnaire and Sampling

The study was conducted between late October and early December of 1994 and completed in January of 1995. A four-part questionnaire and cover letter (indicating that the combined data would be used to advocate for improved services) were mailed to the 69 county coordinators of mental heath services (six counties shared boards) and to a stratified random sample of 120 of the 564 WPA members (21.3%), with at least one psychiatrist selected from each of the 38 counties where the Association had members. The sections of the questionnaire sought demographic information about the respondents and their clinical caseload; respondent perceptions of the "availability" (Not Available, Insufficient, Sufficient) and of the "quality" (Inadequate, Adequate, Outstanding) for 21 types of inpatient, outpatient, and transitional services for five target populations: (a) children, (b) adolescent, (c) adult, (d) geriatric, and (e) minority; and priorities and solutions to availability-quality problems they identified.

Data Analysis

Ratings were compiled and analyzed to determine whether psychiatrists and coordinators had different perceptions about access to and quality of services among the five populations (adult, adolescent, geriatric, minority, children). Scores were calculated for "perceived availability" and for "perceived quality" for the three types of services (Outpatient, Inpatient, Transitional) and for overall services (Total Service Score) based upon average ratings for types of services among the five target populations. These averaged ratings were subsequently submitted to a series of analyses of variance to determine whether perceptions differed between coordinators and psychiatrists and among the five populations. Average ratings were later computed in order to dichotomize each of the 21 services as to perceived availability (Sufficient, Insufficient) and as to perceived quality (Adequate, Inadequate) of inpatient, outpatient, and transitional mental health services in predominantly rural Wisconsin counties.

Results

Response Rates

The first mailing yielded a 30% usable return rate and the second mailing yielded an additional 17% usable return, for a combined usable return rate of 47%, excluding improperly completed questionnaires. Final returns rates were found proportionate to the numbers of surveys sent to the rural counties, but underrepresented urban communities. Half of the usable responses came from county coordinators and half from psychiatrists. Forty-seven of 72 counties surveyed are represented among coordinator responses (66% return rate), while 19 of the 38 counties surveyed are represented by psychiatrist responses (39% return rate). This report, therefore, relates perceptions of availability and quality of services and priority solutions recommended **by rural coordinators and psychiatrists.**

Characteristics of the Respondents

The majority of respondents held either an MD (53%) or MS (32%) degree and were likely to be working in multiple roles as administrator, clinician, and/or psychiatrist. Their median caseload for the previous 12-month period was 240 individuals. Major populations served were adult (58%), adolescent and geriatric (12 and 11%, respectively), and minority (less than 10%). Specialized problems addressed in treatment over the 12 months prior to the survey were for chemical dependency (16%), victims of abuse (12%), secondary disabilities related to mental illness (8%), and medical-legal evaluations (6%). Respondents reported that both public education and professional training in mental health issues were inadequate, unavailable, or difficult to access. Only 39 percent considered either professional or public education about mental health as sufficient, and access to training for professionals was reported as unavailable by 8 percent.

Findings Common Across Populations

Statistical comparisons of "computed scores" for coordinators and psychiatrists revealed reliable differences in their perceptions, but those differences were with respect to "intensity of need," not the presence of need or quality. While coordinator ratings may have been higher than those of psychiatrists, both were in agreement that services are neither (a) sufficient for selected populations nor (b) adequate to meet needs of specific populations ≤ notably children and adolescent and/or minority and geriatric populations.

Their judgements as to availability and quality of mental health services break down along traditional service parameters. Table 1 summarizes overall perceptions of the "availability" and "quality" of the 21 services across the five populations. The table includes percents of the sample reporting each service as sufficiently available and percents reporting qual-

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Table 1. Perceptions of Availability and Quality of Mental Health Services in Rural Wisconsin

Reporting Availability			Rating Quality		
Judged Availability	Services	Percent	Services	Percent	Judged Quality
Sufficient	Assessment and Evaluation (Outpatient)	67.86	Assessment and Evaluation (Outpatient)	87.65	Adequate
	Psychiatrist Services (Outpatient)	56.47	Psychiatrist Services (Outpatient)	86.59	
	Psychologist Services (Outpatient)	68.67	Psychologist Services (Outpatient)	85.90	
	Psychotherapy (Outpatient)	65.88	Psychotherapy (Outpatient)	88.89	
	Alcohol and Drug Abuse (Outpatient)	66.27	Alcohol and Drug Abuse (Outpatient)	76.00	
	Abuse Survivors (Outpatient)	60.98	Abuse Survivors (Outpatient)	76.81	
			Post Traumatic Stress (Outpatient)	72.41	
			Community Support progam (Outpatient)	64.18	
	Assessment and Evaluation (Inpatient)	54.22	Assessment and Evaluation (Inpatient)	77.59	
			Psych Units In General Hospitals (Inpatient)	66.07	
			Public Mental Health Hospitals (Inpatient)	69.23	
			Private Mental Health Hospitals (Inpatient)	71.43	
			Dual Diagnosis (Inpatient)	65.85	
			Alcohol and Other Drug Abuse (Inpatient)	62.96	
Insufficient	Victims of Abuse (Transitional Living)	44.00	Victims of Abuse (Transitional Living)	57.63	Inadequate
	Chemical Dependency (Transitional Living)	32.89	Chemical Dependency (Transitional Living)	49.02	
	Mental Health Needs (Transitional Living)	29.11	Mental Health Needs (Transitional Living)	45.45	
	Eating Disorders (Outpatient)	37.66	Eating Disorders (Outpatient)	58.00	
	Perpetrator Services (Outpatient)	26.76	Perpetrator Services (Outpatient)	50.00	
	Specialized Support Groups (Outpatient)	28.57	Specialized Support Groups (Outpatient)	46.30	
	Post Traumatic Stress (Outpatient)	40.00			
	Community Support Program (Outpatient)	35.37			
	Eating Disorders (Inpatient)	24.68	Eating Disorders (Inpatient)	59.46	
	Psych Units In General Hospitals (Inpatient)	45.24			
	Public Mental Health Hospitals (Inpatient)	40.48			
	Private Mental Health Hospitals (Inpatient)	31.65			
	Dual Diagnosis (Inpatient)	32.10			
	Alcohol and Other Drug Abuse (Inpatient)	40.24			

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ity as adequate when available.

Availability of inpatient services is generally insufficient and transitional services are clearly unavailable and of poor quality when available. Outpatient services are reported to be sufficiently available and adequate to meet traditional needs, but they are not as widely available as desired to meet specially focused outpatient services needs. Where traditional inpatient and outpatient services are available (e.g., assessment and evaluation, psychiatric; alcohol abuse, dual-diagnosis) for rural Wisconsinites, those services are generally perceived as adequate on an inpatient and outpatient basis.

Services that address specialized needs (e.g., physical and sexual abuse, chemical dependency and substance abuse, eating disorders, perpetrator services) or that can improve community integration are neither available nor of adequate quality. For virtually every transitional living option, need is reported as insufficient and, when available, inadequate to meet need, regardless of the population.

Perceptions of Population Specific Needs

Statistical analyses examined ratings of availability and quality among the services and between populations. F-ratios comparing scores were statistically significant with $p < .001$. Important population differences in availability and in quality were found. These revealed better (though not "outstanding" quality) access to and quality of services for adults and sometimes geriatric populations.

The respondents' expressed priorities for increased access and improved quality of services for

children and adolescents, frequently citing specific priorities for psychiatrist services, perpetrator services, chemical dependency, and dual diagnosis services for children and adolescents. Recommendations for solving service problems were identified in the respondent's open-ended response.

Availability. There is a pervasive picture of unavailability of services for all but adult populations, a view shared by both county coordinators and psychiatrists serving rural counties. Several important population differences are notable:

- There is need for increased availability of specific services for children, adolescent, and minority populations and to a lesser degree for geriatric populations.
- Transitional living services are generally unavailable for children, adolescents, and to some extent minorities.
- Inpatient services were perceived as insufficiently available for most populations and particularly limited for children and adolescents.
- Outpatient services of psychologists, for psychotherapy, for assessment and evaluation, and transitional living resources were more often perceived as available for adults and geriatric populations, but not likely to be available for either adolescents or children.
- Psychiatrist services, eating disorder services, and post traumatic stress disorder services are insufficient for children, adolescents, and minorities. Outpatient perpetrator services are insufficient for children.

Quality. Quality of available services for children is reported as inadequate in rural counties by both psychiatrists and county coordinators. While quality of some outpatient, inpatient and transitional living services was more favorably rated than service availability, where availability was rated as insufficient, quality was judged as inadequate.

- Overall quality of available services was perceived as adequate for adults and inadequate for children, adolescent, geriatric, and minority populations.
- Inpatient, outpatient, and transitional living services were reported as more adequate for adults and geriatric populations and least likely to be adequate for children, adolescent, and minority populations.
- Outpatient services were rated poorest for minorities and inadequate for children, adolescent, and geriatric populations.
- Transitional living services were rated poorest for children, adolescents, and minorities.
- Transitional and outpatient services for chemical dependency are generally inadequate for all populations.
- Most inpatient services, when available, were considered adequate across all five populations, though rated poorest for children and minorities.

Respondents' Solutions. Problem areas for children and adolescent services access were most often reported as due to basic funding difficulty (27.4%) and service payment problems (8.8%). This in turn limits the potential for these populations to benefit from community or hospital-based services. On the whole, a high percentage of respondents see the need to have an adequate state and county funding base (60%) that assures availability of relevant services and development of specialized services needed to address unique problems faced by children and adolescents.

Discussion

Findings from this study portray a mixed picture of the availability and quality of mental health services for key populations. While there appears to be better quality of services for an adult population, even here, access and quality are variable, particularly for specialized services (e.g., eating disorders, perpetrator services, support groups) and for transitional living resources (e.g., problems involving abuse, chemical dependency).

Adults appear to have better access and generally more adequate inpatient and outpatient services than do other populations, unless they are aged with mental health needs. If individuals who need mental health services are children, adolescents, or minorities, availability is exceedingly limited and quality of available services is reported as inadequate. Further, the findings are very clear that outpatient and transitional needs of children, youth, and minorities are not being met. Where these services are available for children and adolescents, quality is reported as inadequate.

Accessible, quality services should not be limited to only individuals fortunate enough to live in the few counties where there are services. Given the demographics of the practitioners in this sample, where services are being provided to children and youth, the practitioners providing these services are likely to be doing so beyond their regular adult caseloads and may be doing so with limited clinical experience to appropriately serve children and adolescents. The needs, problems, and special characteristics of children, adolescent, geriatric, and minority clients are different and require different experiences and skills by practitioners.

The data suggest that where

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additional needs exist, the needs are for specialized intervention services and especially for populations often overlooked in the current mental health delivery system: children who are victims of abuse; youth with eating disorders; youth and minorities with stress disorders; children with needs for perpetrator services; and transitional living and substance abuse resources for all populations, to reiterate just a few of the greater needs identified from the research.

Rural mental health services for all populations must be made more equally available (expanded) and provided at a level of quality at least comparable to that of services available to adults. Solutions to these problems can come from increased funding targeted to serving children and adolescents, increased service integration on a county-by-county basis, and fully enforced state mandates to serve all populations.

As another era of reductions in government support for virtually all human service programs approaches, the prominence of a publicly funded mental health services role will likely diminish. A variety of strategies are called for with which to create county and community capacities to respond to serious limitations in the present delivery of needed services across the populations. These strategies must involve the professions, consumers, communities, counties, practitioners, and state/federal government and must unify, present workable solutions, and promote common actions to the problems these data raise. Solutions will likely focus on both county-by-county and state levels.

Responsibilities of the Professions. Professionals (i.e., psychologists, psychiatrists, county coordinators, other practitioners) need to become alert to the extent of needed services and the extent to which current practitioners are not prepared to address service needs of these populations. If service access is adequate for an adult population, is this because there are higher numbers of adults with greater needs, because there is a clear payment system available for this population, or because their preparation and experience are not appropriate to serve alternative populations? The findings suggest expanded roles for the professions to increase awareness of needs, issues, and concerns of these alternative populations among the professions; to increase opportunity to achieve clinical competence in serving them; and to encourage entry-level practitioners with special competencies to serve in rural areas. The professions should consider these findings as topics for preservice and continuing education and guide recruitment and design of curriculum that prepares qualified individuals to address needs of children, youth, minorities, and geriatric populations, as well as adult populations, in rural communities.

State and County Government Roles. There are still important cost-of-care and cost-benefit implications that will need to be confronted if priorities are shifted toward children or youth or the aged. A seemingly singular focus on adults at the county level, that excludes children and adolescent and minorities, may be short-sighted. There may be long-term cost savings for society were access to quality outpatient and transitional living services increased.

While the authors do not suggest decreases in services for adults, the data do question priorities that poorly represent equally deserving populations. A public priority directed toward improving the availability and quality of services staffed by practitioners skilled in serving youth, children, and minorities must be established. Both the state and counties should look to these data as they suggest wherein priorities might be realigned as government resources become less readily available. Public and private funding that can be used to facilitate needs-based coverage for services to these populations in rural counties and unduly restrictive regulations both need to be explored.

Local Community Advantages. Local communities have unique capacities to set expectations for quality services, to create public awareness of needs, and to meet specific individual and population needs. Planning and responsible public roles are called for to determine the extent to which needs suggested by this research are prevalent in counties and in local communities. Local communities can set forth community action plans that establish, locate, coordinate, and place appropriate pressures on mental health and human service systems to set priorities in keeping with needs of each of the populations.

Practitioner and Advocate Collaboration. The geography of rural Wisconsin has long been given as a reason for discontinuous and uneven service access (e.g., lack of public transportation) and uneven access to the most qualified clinicians (e.g., appropriate training resources are too far away). Advocacy groups and professional associations have developed separate efforts to solve delivery-need problems in sparsely populated sectors of the state. Improved telecommunications, greater general access to technology, and significant changes in how public-professional attitudes and knowledge are shaped, though, are now breaking down these geographic barriers.

The paths of professional and advocacy sectors must converge around the fundamental problems with which both deal: public awareness, professionals' general knowledge, resource coordination, and creatively solving problems of

access as needs change. The findings from this study might very well be used, in part, to define priorities for solving the personnel, technology, and access problems both recognize and independently attempt to address.

Conclusions and Recommendations

All populations, except adults, are perceived as underserved in the rural counties surveyed. The populations most in need are children and adolescents, who need additional services and improved quality of services already in place. Despite a mandate from the State to provide mental health services to every citizen with needs, great deficiencies and differences in access and quality exist. It appears that the issues transcend the mental health system and will require concerted policy efforts encompassing political and fiscal advocacy, as well as health and human service design actions.

Potential actions can be undertaken in several different arenas of professional and public education, public policy, and the community. The actions require joint efforts to be successful. Though leadership may come from any constituency, the following five joint actions are recommended to affect necessary changes in access, quality, and appropriateness of mental health services in Wisconsin:

1. Increase public awareness of the unique mental health needs of children, youth, minorities, and geriatric citizens and of the social and economic costs if communities fail to address those needs.
2. Provide clear public messages as to why specialized services are needed and what those services will achieve on behalf of and in local communities.
3. Obtain accurate county-by-county data on specialized and general needs and on incidence of individuals who would actually use services and apply those data in responsible planning that links public and private mental health services.
4. Conduct ongoing outreach to primary community institutions (e.g., schools, churches, medical clinics, police) to sustain public awareness of available mental health resources and changing needs for specialized services and to promote public awareness of effective services in the community.
5. Determine community and/or county priorities, conduct coordinated planning, design community-county located resources, and design or identify known public and alternative funding mechanisms that permit maximum service access and quality.

References

1. Dengerink HA, Cross HJ (Eds.). *Training Professionals for Rural Mental Health*. Lincoln, NE: University of Nebraska Press; 1982.
2. LeCroy CW. Enhancing the Delivery of Effective Mental Health Services to Children. *Social Work*. May, 1992.
3. Wagenfeld MO, Goldsmith HF, Stiles D, Manderscheid, RW. Inpatient Mental Health Services in Metropolitan and Non-metropolitan Counties. *Journal of Rural Community Psychology*. 1988; 8(2).

An Emerging Public Health Perspective on Domestic Violence: Implications for Wisconsin Physicians and Health Care Organizations

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Abstract
In this article, we provide a brief discussion of the health and health care cost consequences of the problem of domestic violence, and a review of some key reasons why physicians may often fail to recognize the signs of this violence and abuse in their patients. In Wisconsin, a variety of agencies, educational institutions and communities are in the process of developing and refining educational initiatives or multidisciplinary response efforts which have medical care components or implications. Collectively, the experience being gained by these various efforts throughout Wisconsin provides a solid foundation from which to further develop and enhance a public health perspective for responding to domestic violence. It is suggested that this perspective can help inform the state's physicians and health care organizations on how they can improve their individual and organizational responses to the problem of domestic violence.

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Introduction
Domestic violence, a major cause of injury and death in the US, is increasingly being recognized as a major public health concern. Although it is difficult to measure the total direct costs of medical care related to domestic violence, it has recently been estimated to be in the range of approximately $1.8 billion per year.[1] The costs for the medical care associated with this violence are, of course, substantially borne by federal and state government, employers and other purchasers of health insurance and services, and by the medical care system itself.

In 1985, the seriousness and importance of domestic violence as a public health issue entered the limelight when C. Everett Koop sponsored the Surgeon General's Workshop on Violence and Public Health. One important focus of that workshop involved how health services should be organized to respond to the needs of victims of domestic violence, to contribute to the prevention of such violence, and to interact with other service delivery systems.[2] This effort to extend the view of domestic violence from one of a law enforcement issue, or a private family concern, to that of a major health concern seemed almost revolutionary at the time. Over the succeeding decade, however, an evolving public health approach to domestic violence and abuse has served to focus increasing interest in encouraging and supporting health care providers to become more actively involved in efforts to respond to these problems.

For example, in 1992 the American Medical Association released a statement emphasizing the health effects of domestic violence, and underlining physicians' ethical obligations to diagnose and treat.[3] A 1991 position statement by the American Nurses Association stated its commitment to increasing awareness of the health problem of violence against women, and called for the education of all health care professionals with regard to prevention, assessment, and intervention.[4]

While this increasing attention to issues of domestic violence is quite encouraging, work remains to be done in order to improve the medical care system's responses to the health consequences of domestic abuse. In this article, we discuss some of the major factors which may deter physicians and health care organizations from effectively identifying and responding to the needs of patients who may be suffering those health consequences. We also provide a description of various recent initiatives and community efforts in Wisconsin to develop effective responses to these problems. Collectively, these various initiatives and efforts represent a growing public health perspective on the problem of domestic violence; a perspective which may better inform the state's physicians and health care organizations about the roles they need to play in addressing this problem.

Barriers to effective medical response
Studies of domestic violence and abuse incidence and prevalence rates have found that from 12% to 30% of women seeking care in

emergency departments are there because of domestic violence[5] and that, of women seen in primary care settings, between 14% and 28% report living in violent relationships.[6,7,8] Domestic violence has been found to involve predictable patterns of injury and complaints, including sleep or eating disorders, depression or anxiety, chronic pain, etc. Thus, domestic violence is associated with high rates of health services utilization, as many of these symptomatic problems are not likely to be adequately resolved until the abuse is addressed. Unfortunately, the evidence is that physicians have, on the whole, poor records of identifying and responding to the needs of victims of domestic violence, and may be recognizing as few as one victim in 20.[9]

One important potential barrier to physician recognition of domestic violence problems may be that some fundamental misconceptions about these problems which prevail in the larger society are also likely common in the medical profession as well. Such misconceptions may include, for example, beliefs that domestic violence is relatively rare, only occurs in certain socioeconomic groups, or that domestic violence is a private, family matter to be resolved without outside intervention.

A recent study of physicians' attitudes toward domestic violence found that they often used the metaphor of Pandora's Box to describe their fears of "unleashing a myriad of evils."[10] This Pandora's Box may include, for example, having to deal with psycho-social issues related to family history, self-esteem and relationships, or law enforcement and reporting concerns. It was found that physicians reported feeling ill-prepared for, and uncomfortable with, asking questions and discussing domestic abuse concerns with patients. Many physicians also reported being unaware of appropriate protocols for identification and assessment.

The study also found physicians voicing frustration with the increasing role they are being asked to play with regard to social problems; problems which can not be expediently dealt with in the time frame that has emerged for medical practice (e.g., 20 minutes or less per patient visit). Thus, the increasing time constraints of busy practices may be a major barrier to raising the subject with patients, even when physicians may have concerns or suspicions about the signs of domestic violence and abuse in some patients.

A final major barrier to effective treatment of victims of domestic abuse by physicians may be the medical care system's historical lack of experience in interacting with other service delivery systems. It has been noted, for example, that medicine has not been "...as successful as we would like to be in the care and treatment of victims of (domestic) violence because of the way our health professionals continue to indulge in compartmentalization ... the vertical separation of one life-saving service or discipline from all others."[11]

An emerging public health perspective on domestic violence in Wisconsin

In Wisconsin, a variety of public and private sector agencies, organizations, and educational institutions are presently developing initiatives to improve the medical care system's responses to victims of domestic violence and abuse. In this section, we review some of the more notable efforts in this regard. Although we don't claim to have "covered the field" with respect to all such initiatives in the state (and apologize in advance for any significant omissions), we believe that this review provides evidence of an emerging public health perspective on domestic violence in Wisconsin.

A number of initiatives in the state focus on educating medical care practitioners on such issues as identification, secondary prevention, and response to domestic violence. For example, in 1994 the State Medical Society of Wisconsin approved a policy on physician reporting of domestic violence, and disseminated a model protocol for the assessment and treatment of victims of domestic abuse. This protocol provides description of injuries and illnesses which are clues suggestive of abuse, describes ways to assess patients for abuse, instructs physicians on appropriate documentation, and suggests a number of intervention strategies.[12]

In the state's medical schools and residency programs, nursing schools and physician assistant programs, strategies directed at assessment and intervention methods are being incorporated into various classes and other educational experiences, both required and elective. In addition, there are special domestic violence training projects located at both the Medical College of Wisconsin and the University of Wisconsin.

At the Medical College of Wisconsin, the Family Peace Project training program (located in the Department of Family and Community Medicine) was developed in 1992 to train medical students and residents to identify victims of domestic abuse and to intervene effectively. The training program includes curriculum modules which address educational objectives such as knowledge and awareness, clinical skills and professional empowerment.[13] The Family Peace Project trains physicians, nurses, nurse practitioners, social workers, medical students and residents, nursing students, and education and social work students. The program is also open to other organizations that wish to

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use the program to train health care professionals and students in their own communities.[14]

At the University of Wisconsin-Madison, the Wisconsin Domestic Violence Training Project (located within the Women's Studies Outreach program) provides training on domestic abuse issues to health care and education professionals. Funding for this project is provided from federal and state sources and is administered by the (newly renamed) Wisconsin Department of Health and Family Services. Its intent is to train local people and community teams to develop ongoing educational programs appropriate to the particular needs and strengths of their communities. In the first four and a half years of the project, more than 200 training activities at the state, regional, local levels and at national conferences have reached more than 10,000 people.[28]

Our review found a number of local collaborative initiatives of note, located throughout the state. For example, in Kenosha the Domestic Violence Project began in 1991 as a joint effort between the city's shelter for battered women and local hospitals. This project has subsequently become an independent not-for-profit corporation serving battered women and health care organizations throughout Kenosha. In addition to victim advocacy, outreach and support, this project also provides a variety of in-service programs and workshops designed to increase health care providers' awareness and sensitivity to the prevalence, dynamics, and health consequences of domestic abuse.[15]

In Milwaukee, the Milwaukee Women's Center has joined in partnership with a local shelter for battered women, a family services organization, and the University of Wisconsin-Milwaukee to create the "Safe At Home" community education and outreach program, a project which is funded by the Centers for Disease Control and Prevention. Through partnerships with Aurora Health Care, the center has also trained primary care physicians and emergency room staff on these issues. A major, in-kind donation from a large advertising agency also resulted in a public awareness and education effort.[16]

In LaCrosse, a Medical Task Force, chaired by the Domestic Violence Intervention Project and including members of various community agencies which serve domestic violence victims, created an educational program for health care practitioners. An in-service program is given at both hospitals in LaCrosse, and is open to hospital physicians and nursing staff, as well as local physician offices and clinics.[17]

In Madison, Meriter Hospital, in collaboration with Dane County Advocates for Battered Women, has hired a full-time staff person who is in the process of developing an education program for all hospital patient care staff. A task force has been created to refine the hospital's domestic abuse protocols and to develop an assessment tool. This partnership between the hospital and a community agency is intended to establish a grassroots, community-based approach to serving the victims of domestic abuse. Meriter is also presently in the stage of developing an outreach educational program for the hospital's affiliated Physicians Plus clinics.[18]

About one-half of all Wisconsin counties now have Coordinated Community Response networks. Such networks are seen as providing greater opportunity for local domestic abuse programs to have input into larger community efforts, and are geared toward developing multidisciplinary strategies for intervention and response, streamlining and coordinating services, teaching communities about the dynamics of domestic abuse, and evaluating the effectiveness of programs.[19]

State government is also attempting to become more multidisciplinary in its approach to the problems of domestic violence and abuse. For example, in 1995 the Governor's Council on Domestic Abuse formulated a long-range plan which contained a number of resolutions, including one of attempting to develop an approach which would have an impact on ***all*** systems and agencies related to domestic abuse at local, county and state levels.[20] The state government also provides funding for the Wisconsin Coalition Against Domestic Abuse, a statewide membership organization for domestic abuse programs with a significant public health perspective, in that its organizational goals include the development of community-based and worksite educational and prevention efforts.[21]

In addition, in early 1996, Wisconsin's First Lady, Mrs. Thompson hosted a one-day Leadership Forum on Domestic Violence. This forum was sponsored by the Milbank Memorial Fund, and brought together a number of representatives from Wisconsin health care organizations, provider and employer associations, advocacy groups, health professions training programs and state government agencies to focus on potential ways to support and strengthen collaborative responses to problems of domestic violence in the state.

Conclusion

In this article, we have touched on a number of issues which help explain why physicians may not always respond effectively to clinical presentations of domestic abuse in their patients, including a lack of knowledge or skills in dealing with these issues, the pressures of an increasingly competitive medi-

cal care delivery environment, and medicine's traditional lack of experience in interacting with other service delivery systems and community-based programs. We have proposed that a public health perspective -- emphasizing prevention and multidisciplinary models of problem-solving -- provides an excellent framework for the development of domestic violence prevention and intervention strategies which span a continuum of services. We have suggested that the experience being gained by the growing number of domestic violence educational efforts and collaborative response initiatives throughout Wisconsin provides a solid foundation from which to further develop this public health perspective on domestic violence response and intervention.

In 1992, the AMA stated that:

> "the medical community -- along with the criminal justice system -- is the most likely to see ... victims (of domestic violence) and as such constitutes a frontline of identification and intervention. However, physicians and other medical staff are rarely provided with training or specific protocols to aid in dealing with these cases."[3]

From our review of various educational efforts throughout the state, however, it appears that there *are* many resources available for Wisconsin physicians and other health care practitioners to become more knowledgeable about the signs of domestic violence in their patients and about appropriate and effective ways to respond. It will be important that more health care organizations in the state take advantage of these educational opportunities for their providers, adopt model protocols, and work to develop effective response teams within their facilities.

We have suggested that a public health perspective can be useful in assisting physicians and delivery systems in identifying and enhancing the unique role which medical care can play within spectrum of services which are required by domestic violence victims. In order to enhance their roles, physicians and health care organizations will need to become more familiar with the various community-based services within their communities that can serve as referral sources for their patients. In particular, it is important that physicians and health care organizations become more actively involved in their communities' Coordinated Community Response networks.

Physicians and health care organizations can not solve or prevent the problem of domestic violence; however, they should not ignore the problem either. Rather than being afraid of opening a Pandora's Box of domestic violence concerns, it seems crucial that physicians and health care organizations become increasingly aware of how morbidity and utilization patterns associated with domestic violence impact, not only on their bottom line, but on the overall health of their communities as well.

Acknowledgments

We'd like to thank a number of people who provided valuable information on the various initiatives and efforts in Wisconsin relating to domestic abuse and health, including: Rebecca Ames, Diane Bambeck, Mark Chelmowski, Amanda Cosgrove, Geraldine Diemer, Sherri Hamilton, Marv Kolb, Ellen Kreager, Jean Lahti, Mary Lauby, Kaye Lillesand, Martha Mallon, Judy Manaker, Judith Miller, Laurie Pertner, Sonya Rechke, Carol Reese, Patti Seeger, Melissa Stiles, Carey Tradewell, Peg Volkman, Earnestine Willis, and Nancy Worcester.

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References

1. Miller TR, Cohen MA, Wiersema B. *Crime in the United States: Victim Cost and Consequences.* Final report to the National Institutes of Justice. Washington, DC: The Urban Institute and the National Public Services Research Institute. 1995. Reported in: C Warshaw and AL Ganley, *Improving the Health Care Response to Domestic Violence: A Resource Manual for Health Care Providers.* San Francisco, CA: The Violence Prevention Fund. 1995.
2. Plenary Session IV. Recommendations of the Work Groups. In: *Report on the Surgeon General's Workshop on Violence and Public Health.* Leesburg, VA: U.S. DHHS and U.S. Department of Justice. (DHHS Publication No. HRS-D-MC 86-1.) 1987, pp. 71-74.
3. Council on Ethical and Judicial Affairs, American Medical Association. Physicians and domestic violence: Ethical considerations. *JAMA.* 1992;267:3190-3193.
4. American Nurses Association. *Position Statement on Physical Violence Against Women.* Washington, DC: ANA Board of Directors. September 1991.
5. Abbott J, Johnson R, Kosiol-McLain et al. Domestic violence against women: Incidence and prevalence in an emergency room population. *JAMA.* 1995:273:1763-1767.
6. Elliott BA, Johnson MMP. Domestic violence in primary care settings: Patterns and prevalence. *Arch Fam Med.* 1995;4:113-119.
7. Gin NE, Rucker L, Frayne S, et al. Prevalence of domestic violence among patients in three ambulatory care internal medicine clinics. *J Gen Int Med.* 1991;6:317-322.
8. Hamberger LK, Saunders DG, Govey M. Prevalence of domestic violence in community practice

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and the rate of physician inquiry. *Fam Med* 1992;24:283-287.

9. Flitcraft A. Battered women in your practice? *Patient Care*. 1990;(Oct):107-109.
10. Sugg NK, Inui T. Primary care physicians' responses to domestic violence: Opening Pandora's box. *JAMA*. 1992;267:3157-3160.
11. Koop CE. Plenary Session 1. In: *Report on the Surgeon General's Workshop on Violence and Public Health*. Leesburg, VA: U.S. DHHS and U.S. Department of Justice. (DHHS Publication No. HRS-D-MC 86-1) 1987, p. 3.
12. State Medical Society of Wisconsin. SMS Board of Directors approves policy on reporting of domestic violence. *Wis Med J*. 1994;93:178,180-182.
13. Ambuel B, Hamberger LK, Lahti J. The Family Peace Project: a model for training health care professionals to identify, treat and prevent partner violence. In press: LK Hamberger (ed.), *Violence Issues in Medical Education*. Haworth Press.
14. Personal communication from Jean Lahti, Coordinator of the Family Peace Project, December 1995.
15. Informational materials supplied by the Domestic Violence Project. 1996.
16. Personal communication from Carey Tradewell, President/CEO Milwaukee Women's Center, Inc.
17. Personal communication from Ellen Kreager, Victim Witness Coordinator, District Attorney's Office, LaCrosse, Wisconsin.
18. Personal communication from Sonya Reschke, Hospital Advocacy Coordinator, Meriter Hospital, Madison, Wisconsin.
19. Division of Community Services. Department of Health and Social Services. *State of Wisconsin Program Activity and Performance Report, FY 1995, Family Violence Prevention and Services Program*. December 1995.
20. Governor's Council on Domestic Abuse. Workplan for 1995-97. January 1995.
21. Personal communication and material supplied by Mary Lauby, Wisconsin Coalition Against Domestic Violence.❖

Domestic Violence in the Workplace Facts and Figures

- The National Institute for Justice estimates that domestic violence costs Americans $67 billion per year, almost 15% of total crime costs.
- Domestic violence costs employers$3-5 billion annually due to absenteeism, higher health care costs, higher turnover, and low productivity.
- Domestic violence costs the US health care system $5-10 billion annually.
- In 1980, 175,000 work days were lost nationally due to domestic violence.
- Abusive spouses/partners harass 74% of employed victims at work; causing 56% of them to be late five times a month, 28% to leave early at least five days a month, 54% to miss three full days a month, and 90% to lose one day per month.
- 26% - 50% of abused working women lose their jobs due to harassment on the job, the need to flee and secure safe shelter, time spent waiting in court, and abuse-related job performance problems.
- 94% of corporate security and safety directors surveyed ranked domestic violence as a high security problem.
- The National Institute of Justice estimates that in 60,000 incidents of violence in the workplace the victims know their attackers intimately.
- Homicide is the leading cause of death for women on the job.

Information provided by the Family Violence Prevention Fund and reprinted from the Domestic Violence Intervention Project's D.V.I.P. December 1996 NEWSBRIEF newsletter.

What's New In . . .
Rehabilitation Medicine

James W. Leonard, DO, PT, and James McCormick, MS, Madison

THE CURRENT TRENDS in health care are having a major impact on rehabilitation, particularly in-patient programs. Physiatrists and hospitals with inpatient rehab programs were in an enviable position in the 1980s when diagnosis-related group (DRG) exemption accelerated their growth. The shift to capitation has resulted in growth in outpatient, sub-acute and home based care, with shrinking or stagnation of hospital based programs.

Physiatrists have responded by changing the content and focus of their practices and training programs. The specialty is in many ways recasting itself as a primary care group. The emphasis is on offering care for many chronic disabilities, i.e., disease management. Also, the conservative treatment of musculoskeletal disorders fits well with the rehab philosophy. Inpatient rehab is still a core area, but is becoming more efficient along "product lines." While this blurs the lines of responsibility among the rehab disciplines such as Physical and Occupational Therapy, it will expectedly result in a more patient-centered model of care in the long run.

A major thrust of physiatrists and hospitals is their alliance to large systems to ensure a continued stream of patient referrals. There is a realization of the need to be concerned with the viability of the health care systems which individual members belong to, as this more and more affects their practice of physiatry. The reputation of the individual practitioner may count less than his ability to access distribution channels of patients.[1] Unfortunately the main point of discussion in contracting at this stage is cost, with quality and patient satisfaction with their care taking a back seat. A necessary response to this has been documentation of the "big four" of outcomes, including costs, length of care, patient satisfaction, and pre- and post-treatment functional status.

Health care providers, insurers, case managers, and employers are accustomed to evaluating programs based on costs and length of care. Patient satisfaction surveys should reflect their perception of health. Functional outcome measures are still evolving, with several standardized forms available such as Functional Independent Measures (FIM), and the short form, 36 question (SF-36), developed by the Rand Corporation. The bottom line appears to be that in order to compete, you must document what you do.

Physiatrists are well entrenched in goal-oriented treatment programs. In order to communicate the results of the process to interested parties, diagnosis specific measurements have been formulated. (See figure 3.)

Physiatrists are realizing the need to be more process, not procedurally oriented. The question we are addressing is what is the value added service that we provide to health care? This is the time of accountability. We have been patient oriented, with less attention to the entire system. There is a realization of finite resources being available for rehab efforts. We must use it more efficiently. A preventive, community-based model appears to be the ideal goal to strive for.

In order to document, there has to be infrastructure support for adequate information gathering. While core data common to the entire system is needed, physiatry is working on databases to develop benchmarks for specific diagnosis.

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Figure 1. The shift in focus
Inpatient rehab -- sub-acute -- out-patient -- home based care

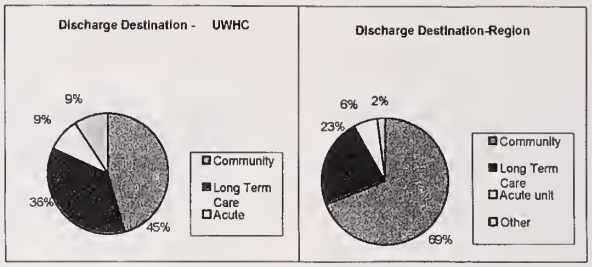
Figure 2. Physiatrists -- Questions for the community
- Who are we? - What do we do? - How long does it take to do it? - Whats the cost? - What is the result of the care process?

James McCormick is the Administrator of the Department of Rehabilitation Medicine of the University of Wisconsin Hospital and Clinics. Dr Jim Leonard is an Assistant Professor in the Department of Rehabilitation Medicine, University of Wisconsin Medical School, and is affiliated with the University of Wisconsin Hospital and Clinics.

Clinical Outcome Profile
Jan 1 1996-Mar 31 1996

University of Wisconsin Hospital and Clinics
REHABILITATION CENTER - Inpatient Unit

Diagnostic Group: Stroke		UWHC	Region
Number of Clients Reported:		11	2980
Satisfaction Index:			
(1 = Strongly Disagree 4 = Strongly Agree)			
Mean Age:		65	71
Male:		55%	49%
Onset to Admission Days:		24	13
Mean Length of Stay:		26	20
Mean Charge/Day:		$ 969.58	$ 1,080.80
Average Total Charge:		$ 25,209.00	$ 21,616.00
Prehospital Living Setting:	Community	100%	unreported



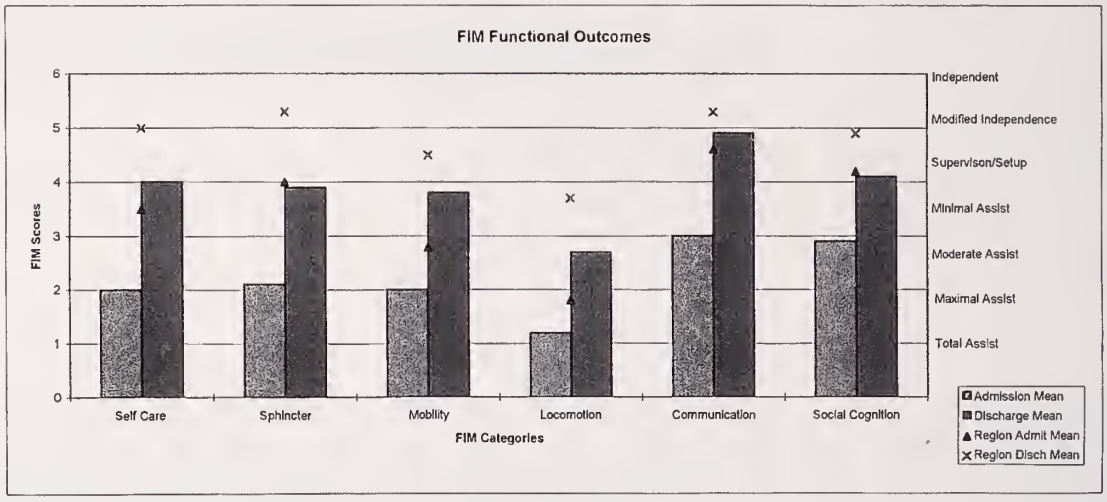


Figure 3. Clinical Outcome Profile, Jan 1, 1996 - Mar 31, 1996

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This is necessary if we are to negotiate contractual arrangements for services. What does it cost to rehab a head injury, a lumbar strain, a repetitive stress disorder? Until we can answer these questions, our abilities to effectively negotiate are compromised.

Our traditional emphasis has been on the provision of services in a hospital setting. Looking at and working towards a community-based system of delivery will require a change in focus and a shift in the "culture" of physiatry. While some will see the current trends as threatening, others see great opportunities in these changes. Physiatry has had a traditional role of "batting in the clean-up position," particularly in handling some of the chronic cases that required longer term care.

Now there is an opportunity to introduce rehabilitation principles in a preventive mode to allow health care systems to identify difficult cases early, which hopefully will result in more cost-effective management by the disciplines in the field of rehabilitation. As stated by Shortell et. al., outcomes research, protocol development, quality improvement processes, and related activities that focus on disease prevention, health maintenance, and promotion will have a larger impact and payoff than the current focus on acute and chronic care.[2]

While physiatrists take great pride in looking at our field as being unique, we have to realize that health care is a business and we must transform ourselves as other industries have done in the past. Alfred Chandler, in his book *The Visible Hand*, looked at railroads, telephone and telegraph systems, and multiple other segments of the economy. All of these have undergone restructuring, mergers and streamlining; why should physiatry be any different?

As Michael Porter stated in *The Competitive Advantages of Nations* "...at the root of the growth of the large, multi-unit service firm is the systemization and in some cases standardization of the process of delivering services. The firm is able to replicate services consistently and efficiently at many locations because it creates standardized facilities, methodology and procedures to guide the behavior of employees, and automates individual service delivery tasks."[4]

While some shudder at the prospect of providing stereotyped

health care, there is certainly a need to look at means of simplifying the process. Also, identifying points of "discontinuity" is important. A good example would be a musculoskeletal injury that has done well from a medical standpoint but has an adversarial relationship with his employer that negatively affects the eventual outcome goal of return to work. The case-management approach to this example fits well with the rehabilitation model of care and can save money by addressing these types of discontinuity issues in a timely fashion.

Alan R. Zwerner, MD, stated that "we must provide a J.D. Powers-type set of data that makes sense to lay people, and be willing to live or die by it. Those doctors who aren't able to prove value are in for hard times."[5]

Scott Geller, PhD, asked an audience which group they would rather belong to:

- those who make things happen;
- those who let things happen;
- those who don't know what's happening.[6]

Physiatry's goal is to continue to control our destiny by adopting a pro-active approach to change.

References

1. Cope, Nathan: Integrating the parts to form a delivery system. *Physical Medicine and Rehabilitation in Clinics of North America*. Vol. 7,No.1, Feb,1996.pp185-199.
2. Shortell, Stephen M. et.al.,: Remaking Health Care In America. Josey-Bass Publishers,1996.p24.
3. Chandler, Alfred D. University Press, 1977.
4. Porter, Michael Press,1990. The Visible Hand. Belknap Press of Harvard: The Competitive Advantage of Nations. The Free Press, 1990.
5. Azevedo, David: Taking Back Health Care. *Medical Economics*. June 24,1996. p 166.
6. Geller Scott: Keynote speech to the Wisconsin Safety Council. Annual meeting, April, 1995. ❖

Public Health
Community Health Planning - Oneida County, 1995

Mary Hilliker, RD; Erv Teichmiller; Kathryne Sutliff, RN; Terri Timmers, RD; Rhinelander; and Nancy E. Chudy, MPH, Madison

Background

An essential activity and core function of public health is to assess public health needs and advocate for the provision of reasonable and necessary public health services. In Wisconsin, many health departments are currently involved in the process of community needs assessment. The community is called upon to identify health and social needs, set priorities, and develop a plan to address them. The purpose of this article is to present one health department's experience with community needs assessment.

Methods

The Oneida County Health Department, located in Rhinelander, serves a predominantly rural population of 32,300. In 1995, the health department formed a 12-member Community Health Planning Committee comprised of leaders from business, industry, education, health care organizations, and other community groups. The Committee's goal was to assist the Board of Health by advising them about priority health and social problems. The Committee promoted the prevention of premature death, disability and illness by developing a *Community Health Plan - Oneida County*, and assisted the Board in its statutory responsibility of community assessment[1].

Health department staff collected health data from local, state and national sources, including Centers for Disease Control and Prevention's Wide Area On-line Data for Epidemiologic Research (WONDER) system. The Committee identified, prioritized, and analyzed community problems based on available health data and resources. The Committee called upon additional experts in the community to help inventory community resources and develop effective strategies for each health problem. Evaluation indicators were added to the community plan to aid in reviewing the community's progress in improving health. The tool used to assess the public health needs in Oneida County was *Assessment Protocol for Excellence in Public Health* (APEXPH)[2].

Results

The Community Health Planning

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Committee established the following priorities:

• Chronic Diseases:
Heart disease, cancer and chronic obstructive pulmonary disease are major health problems in Oneida County. Age-adjusted mortality rates for Oneida County, Wisconsin, and *Healthy People Year 2000: National Health Promotion and Disease Prevention Objectives* goals were compared for cardiovascular disease, stroke, all cancers, lung cancer, breast cancer, diabetes, and chronic obstructive pulmonary disease[3]. The Committee found that the rates for cardiovascular disease, stroke, all cancers, lung cancer, and chronic obstructive pulmonary disease for Oneida County were above State and national goal rates (Figure 1).

Action steps to reduce the burden of chronic disease in Oneida County will include community strategies to increase physical activity, decrease tobacco use and improve nutrition. The health department will monitor progress by reviewing health status objectives for chronic diseases, tobacco use, physical fitness opportunities and availability of low-fat food choices in commercial food establishments.

• Teenage Pregnancies:
There are many unplanned pregnancies in Oneida County among teens. The Committee reviewed teenage birth rates of Oneida County with those of the surrounding 15 counties of the Division of Health - Northern Region. The teenage birth rate is the number of births to females 15-19 years divided by the population of females 15-19 years (per 1,000)[4]. Oneida County rate of 41/1000 births compared with the region rate of 36/1000 births (Figure 2). In 1992 the teen birth rate in Oneida County was 53/1000 births compared to 43/1000 births for the state of Wisconsin. The Committee's plan focused on educating youth, parents, and the community about teen pregnancy prevention, including the availability of family planning; and empowering parents in their important role in influencing their teens's behavior. The health department will continue to track progress in this area by reviewing teen birth rates.

• Mental Health:
The Committee reviewed male suicide rates in Oneida County. The death rate of 60.5/100,000 from suicide for men ages 45-54 years was compared to 23.3/100,000 for men the same age in Wisconsin. The community plan will address the problem by bringing mental health providers together to support a coordinated effort to improve access to services for families, and target advertising messages for males. The health department will continue to monitor suicide rates and report to the community.

• Alcohol and other Drug Abuse:
Substantiated child abuse/neglect cases with alcohol and other drug abuse stressors for the Forest/Vilas/Oneida County area doubled from an average of 50 cases per year for years 1987-1991 to 101 cases in 1992. Alcohol access, use, and abuse in Oneida County was also evident in other data

Hilliker is a public health nutritionist and Timmers is director of the Division of Health - Northern Region Office, Rhinelander. Hilliker was with the Oneida County Health Department and was staff to the Oneida County Community Health Planning Committee at the time of the assessment. Sutliff is director of the Oneida County Health Department, Rhinelander. Teichmiller is the executive director of Community Mental Health Services, Inc., Rhinelander, and served as chair of the Oneida County Community Health Planning Committee. Chudy is an epidemiologist with the Division of Health, Bureau of Public Health, Chronic Disease Prevention and Health Promotion Section, Madison.
This assessment was funded, in part, from a Centers for Disease Control and Prevention cooperative agreement (U58/CCU500573-11).

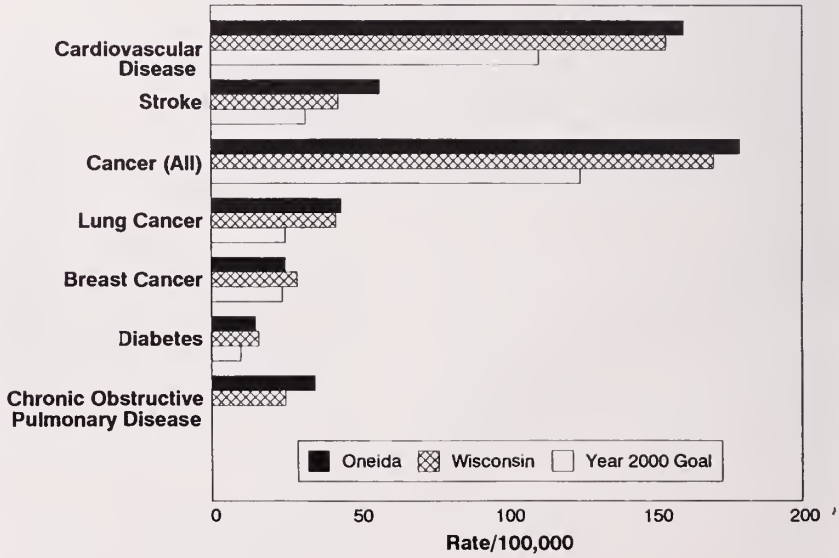


Figure 1 - Comparison of Oneida County, Wisconsin, and Healthy People Year 2000 Goal mortality rates for selected chronic diseases, 1989-91.

sources including the Teen Assessment Project from the University of Wisconsin-Extension, the Wisconsin Behavioral Risk Factor Survey, and hospitalization discharge rates. The community health plan will focus on reducing youth access, public policy, and education.

- Access to Dental Care.

There is more demand for dental care for Medical Assistance (MA) recipients than there are dentists who are willing to take MA patients. Nineteen dentists in Oneida County are certified MA providers but only two dentists accept new MA patients for numerous reasons. There were an average of 3,053 MA recipients per month in Oneida County in 1995. The health department will form a task force to work to improve access with current dentists or investigate the possibility of a public dental clinic. Dental health prevention action steps such as improving fluoridation of public water supplies and youth and parent education will be emphasized. The health department will monitor progress in the area of access to dental care for MA recipients.

The community needs assessments are one of many responsibilities of local boards of health as well as local health departments described in Wisconsin State Statutes 251.04 and 251.05. Local boards of health are to: assess public health needs, and advocate for the provision of reasonable and necessary public health services; develop policy and provide leadership that fosters local involvement, that emphasizes public health needs, and that advocates for equitable distribution of resources and complementary private activities; and assure measures are taken to provide an environment in which individuals can be healthy. Local health departments mandates are: to regularly and systemically collect, assemble, analyze and make available information on the health of the community, develop public health policies and procedures for the community; and involve key policy makers, and the general public in determining a set of high priority public health services and assure access to these services to every member of the community.

The Oneida County Community Health Planning Committee addressed its legal mandate and accomplished its goal of bringing leaders together to assess, prioritize and plan for the health needs of the community. There has been a positive response by the Committee in participating in the process of needs assessment and by the community to the plan. This population-based approach serves as a model for other communities throughout the State.

Acknowledgements

The authors acknowledge the contributions of the Oneida County Community Health Planning Committee members, Oneida County Health Department staff, Oneida County Board of Health, and Patrick Remington, MD, MPH.

The Wisconsin Division of Health, Bureau of Public Health, is active in its support of community needs assessments and local public health department participation. For information, contact Margaret Schmelzer, Bureau of Public Health, (608) 266-0877, or Mary Hilliker or Kathryne Sutliff, Oneida County Health Department (715) 363-6111.

References

1. Community Health Plan - Oneida County. Oneida County Health Department, Rhinelander, 1995.
2. Assessment Protocol for Excellence in Public Health. National Association of County Health Officials, Washington, DC, March, 1991.
3. Healthy People Year 2000: National Health Promotion and Disease Prevention Objectives. US Department of Health and Human Services, Public Health Service, DHHS Publication No. (PHS) 91-50212.
4. Births to Teens in Wisconsin. Wisconsin Department of Health and Social Services, Division of Health, Center for Health Statistics, January, 1994. ❖

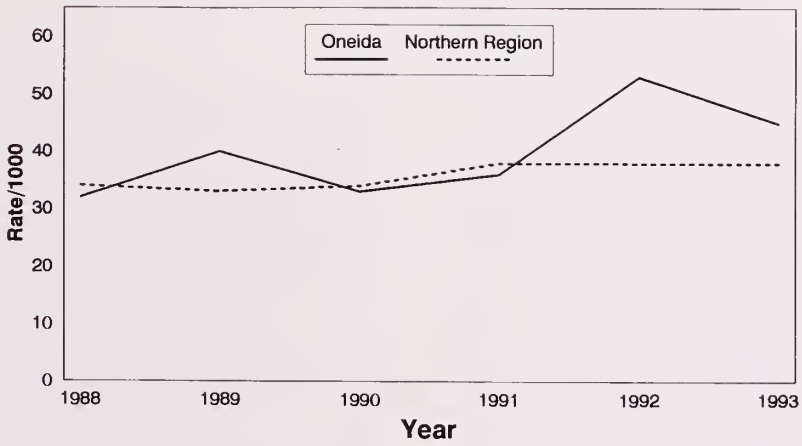
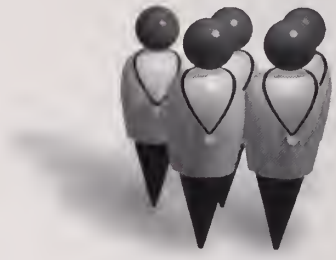


Figure 2 - Teenage birth rates of Oneida County and Division of Health - Northern Region, 1988-1993.



Issues in Managed Care Contracting

Kalisa Barratt, JD, SMS Attorney

A RECENT STUDY showed 82% of physicians in the Great Lake's region of the country are involved in some sort of managed care agreements. Indeed, the study showed the Midwest's managed care penetration to be the highest in the country. Every non-employee physician who agrees to be a provider for a managed care organization (MCO) does so by signing a written contract. These contracts, sometime thirty pages long, set the guidelines for the responsibilities of the parties. However, contract language is not always as clear as it seems. Because contract language may contain hidden meanings not readily discernible by a non-lawyer, the following article highlights "red flag" areas commonly found in managed care contracts.

Golden rules of contracting
First, although the following rules seems elementary, failure to follow these suggestions could lead to catastrophe. Make sure:

- Every blank is filled in.
- Vague generalities and open-ended terms are avoided.
- Every term negotiated orally is incorporated in writing into the contract.
- Every document referenced in the agreement is obtained and reviewed.
- The entire contract is read and understood **before signing.**

Remember that all managed care contracts are negotiable documents. As you read the contract, remember, whomever drafted the language did so in a biased manner. Managed care contracts favor the MCO. However, there is always room for negotiation and any contract can be amended by the stroke of a pen.

Specific problem provisions
Incorporated by reference indicates documents that are not part of the contract will become binding, and their terms enforceable. This is a standard practice in managed care contracts.

Open-ended terms allow changes to be made to terms which the physician agreed to be bound by, but which the managed care entity may unilaterally modify without amendment of the agreement, and possibly, without notice.

Sample Contract Language: "Physician agrees to abide by and be bound by the quality improvement and utilization review requirements and procedures established by the Plan from time to time."

Comment: Allowing a contract to be executed with open-ended terms is equivalent to signing a contract with blanks that are to be filled in by the MCO in the future with no input from the physician. Consider requiring specific, binding terms and notice of proposed changes. Physicians should obtain and review all documents incorporated by reference, understand them, and make sure they are consistent with physician's standard of practice and do not cause undue administrative burdens. It is inadvisable to agree to be bound by terms that can be unilaterally amended. If the MCO refuses to provide the documents you must consider not entering into the contract. At the

Kalisa Barratt, JD

very least, you should have an opportunity to terminate the contract without penalty if changes are unacceptable.

Indemnification/hold harmless provisions are used to shift liability, usually to the physician. "Indemnification" means that you agree to pay for any costs incurred by the MCO as a result of your actions in performing the agreement. This may include attorney fees and can be very expensive. "Hold harmless" means you won't hold the MCO responsible for damages arising out of the agreement -- making it difficult to sue them. "Two-way" indemnification, where both parties agree to indemnify each other for their own acts, is fairer -- but remains problematic:

Sample Contract Language: "The parties hereto mutually agree to indemnify and hold each other (including their officers, agents and employees) harmless against any and all claims, demands, damages, liabilities and costs incurred by the other party, including reasonable attorneys fees, arising out of or in connection with, either directly or indirectly, the performance of this Agreement, or any other act or omission by or under the direction of the indemnifying party or its employees or agents."

Comment: Even if the indemnification is two-way, like above, most professional liability insurance policies specifically exclude from coverage any liability assumed under contract. As such, the physician might be **personally liable for the plan's defense and any liability it incurred as a result of a lawsuit.** Before signing a contract that contains indemnification or hold harmless language, you should notify your malpractice and/or general liability carrier to see whether they consider this extra-contractual and non-covered. Although the physician makes medical decisions, a plan requiring prior authorizations and utilization limitations may impact medical judgments. It is thus patently unfair for the MCO to shift liability to the physician. Try striking the "indemnify" language.

Comment: Watch for hold harmless clauses that are not specifically identified as such. For example: clauses that say the physician agrees to be "solely responsible" for any damages that occur as a result of his or her actions; or, "physician agrees that regardless of MCO's decision to deny access or payment for care, it will not affect the medical treatment rendered by participating physician." Although theoretically correct, this is actually the MCO trying to skirt liability for its own UR decisions.

Most favored nation clauses will force the physician to give the MCO his or her best price for covered services -- including Medicare and Medicaid rates! If you enter into an agreement with lower reimbursement, then the price charged to the MCO with the most favored nation clause would automatically be reduced to that amount.

Sample Contract Language: "If, during the term of this Agreement, the Provider enters into any contract or other arrangement under which the Provider renders Provider Services at a discount rate, differential, or other allowance for a comparable volume of admissions which is more favorable than the payment method set out in Attachment B, then the Provider shall immediately notify MCO and MCO shall be entitled to such discount rates."

Comment: Obviously not in the physician's best interest and possibly an administrative nightmare.

Term and termination (deselection) -- "Term" refers to how long the contract will be effective if neither party terminates it. One year terms are common. However, most MCO contracts are "evergreen" because they automatically renew unless the parties take some sort of affirmative action 30-60-90 days before the contract expires. Usually, MCO contracts have both "for cause" termination provisions and "no cause" termination provisions.

Sample Contract Evergreen Provision: "The initial term of this Agreement shall commence on the effective date hereinabove provided and expire the following December 31. This Agreement shall automatically be renewed for successive one (1) year terms unless either of the parties notified the other in writing, not less than ninety (90) days in advance of the expiration date, of the party's intention not to renew this Agreement."

Comment: **This automatic renewal also includes fee schedules. Fee schedules should be renegotiated yearly.** If the fee schedule is attached as an exhibit, add language that this renewal provision excludes the exhibit or language excluding fees. Have a tickler system in place to alert you when termination notification must occur should you wish to renegotiate. If you miss the stated deadline, the contract renews and you may be forced to continue your obligations to the MCO and its enrollees.

Sample Contract "For Cause" Termination Clause: "Notwithstanding any other provisions contained herein, this Agreement may be terminated immediately upon written notice from MCO to Physician (i) in the event physician commits any act or engages in any conduct for which his or her license may be revoked or suspended by the licensing authorities of the state

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Negotiating Managed Care Organization Contracts: A Reality Check

It helps to know what's negotiable in managed care contracts. A managed care organization (MCO) contract is based on the premise that you should control or manage certain aspects of your practice, so it is important to identify and then negotiate out items you cannot control or manage.

What's Negotiable

Carve-outs. If you cannot perform or control the utilization of services designed by a CPT code, you may want to have those codes "carved out" of the contract. You want to know the frequency, dollar volume of the CPT codes, and number of MCO members to compute the capitation rate for each code. Carve-outs are not always possible, but it may be worth trying.

Uniqueness or Demand. If you are a specialist or your group is efficient in patient management, you may be in a good position to negotiate. Certain specialists -- such as neurosurgeons -- are in high demand in most areas so they have a better bargaining position. Large primary care or multi-specialty groups are desirable due to being very cost-effective in providing a full range of patient care.

Start-up MCOs. Your power of negotiating is generally stronger when the managed care organization is a new entity without a track record.

External Stop-Loss. Buying stop-loss insurance to protect yourself is usually less expensive when not purchased through the MCO, so you may want to negotiate it out of the contract.

Ancillary Services. You might want to negotiate out some ancillary services when you are not directly in control of such services. In some cases, you may want other physicians to perform ancillary services that would traditionally fall within your control. For example, an orthopedist may be reading x-rays that a radiologist might generally handle.

Administration. Try to build administrative costs into your rate. With an MCO, your administrative tasks may shift, but they still need to be handled. For example, you may not be responsible for collecting receivables, but your administrative burden may be heavier at the front end.

Negotiating Obstacles

Large Market Share. If the MCO has an extremely large market share, it is often difficult to negotiate. They are literally in a "take it or leave it" position. You'll need a large provider base to move a large market share MCO off dead center.

Long Established MCO. MCOs that have been long established have more data and a better financial picture of how you will likely perform economically and operationally. Their position will be supported by such data, making your negotiating stance weaker.

Religious Issues. Issues that will never be negotiated are those related to religion and the resulting care issues which may arise due to certain religious doctrine.

Hold Harmless Clauses. Many enrollees hold harmless provisions are not negotiable because they are mandated by law.

Negotiating is more an art than a science so, while this list may be a starting point for knowing what's negotiable and what's not, you would be wise to consider discussing such issues with legal and financial advisors who are familiar with the process.

Continued from previous page

(whether or not such licensing authorities actually revoke or suspend such license) or is otherwise disciplined by such licensing authorities or (ii) in the event physician is no longer duly licensed to provide the Health Care Services contemplated by this Agreement or (iii) in the event physician's professional liability insurance coverage lapses for any reason, or (iv) physician fails to adhere to MCO's QA, UR or Provider Manual re-

quirements as required in this Agreement."

Comment: Basically, any failure on physician's part to follow the plan's rules is considered a breach of contract and is grounds for immediate termination. Subsection (i) is broad and ambiguous. It leaves undefined how the triggering act is determined and who makes the determination? Further, (iv) is too broad and incorporates documents by reference. Immediate termination provisions should be negotiated to identify specific acts and circumstances that would justify termination. Substitute due process or mediation procedures in lieu of unilateral termination. "For cause" might include failure of the MCO to maintain insurance coverage. Further, consider under what circumstances **you** would like to be able to immediately terminated the contract. (See the following sample, below.)

Sample Termination for Amendment to Contract Provision: "MCO shall give at least 60 days advance notice of any amendment to the UR program. Provider may terminate this Agreement by giving MCO ten (10) days written notice if provider disagrees with amendment."

Sample Contract No Cause Termination Provision: "This Agreement may be terminated by either party without cause at any time with ninety (90) days written notice in advance of the effective date of such termination."

Comment: Nearly every contract will contain a provision like this. This type of clause carries both positive and negative implications. For the physician, this clause may be the only way to get out from under an oppressive contract. In that regard, ninety days (three months) is probably too long. Try negotiating a shorter period. However, these provisions have been used by the MCO to deselect physicians from the provider panel. It **is important to remember terminating a contractual relationship with the MCO is not the same as terminating the physician-patient relationship. Regardless of an MCO contract termination, improper termination of the physician-patient relationship may result in physician tort liability.** Do not assume that because your MCO contract is terminated, you have no responsibility to the enrollee/patient. You should follow your standard office patient termination procedure -- sending certified letters of termination with appropriate notice.

Covered services are those services covered under the agreement for which the MCO agrees to reimburse the physician. This term is usually defined in the glossary or definition section of the contract. There is little to no uniformity between plans as to what is and is not a covered service. Although under Wisconsin insurance law there are certain statutory mandated benefits that apply to HMOs, self-insured employers and IPAs are generally not considered insurers and are therefore not required to comply with this law.

Sample Contract Language: "Covered Service" means those services rendered by Provider to Enrollees which are eligible for reimbursement under a Benefit Plan to which this Agreement pertains."

Comment: This definition is not very helpful to physicians or office staff in determining what services are covered services. The definition is illustrative but not inclusive because coverage depends on the individual's Benefit plan and program. Absent a copy of the Benefit Plan, it is impossible to determine what is and is not covered. Ask the MCO for copies of each coverage document. If the MCO does not supply the documents, an alternative is to have the enrollees bring a copy of the policy to the initial visit; photocopy it and keep it on file.

Conclusion

Tangled webs of contract language contain traps for the unwary. Although only addressing the tip of the iceberg, this article has emphasized some of the more common ones. The 1995 SMS publication *A Physician's Guide to Wisconsin Health Law, Volume III* contains a chapter on managed care and managed care contracts. **Mark Adams, SMS Corporate Counsel, and Kalisa Barratt, SMS Staff Attorney are also available to answer general questions relating to managed care contracts.**❖

Liability and Managed Care legal document available soon

The Medical Liability and Risk Management Commission, in response to immediate past president Marcia Richards', MD, theme of "patient and physician advocacy in the managed care environment," is happy to announce that a document entitled "Malpractice Liability and Managed Care" will soon be available to SMS members. The document, developed by the California Medical Society and adapted to Wisconsin law by SMS legal staff, presents an excellent overview of issues facing physicians involved in managed care.

The document covers such issues as: Physician liability for unitization review decisions, gatekeeper responsibilities, liability associated with financial incentives, and treatment protocol risks. Dissemination of the document will occur pending final Board action.

MetaStar Matters

Diabetic Retinopathy Project

Joseph N. Blustein, MD; Jay A. Gold, MD, JD, MPH; Kristine M. Miesbauer, RN; and Chris L, Halvorsen, MS, Madison

MetaStar Matters

Readers will note a new title for this column, previously called *A Word from WIPRO.* The organization formerly known as WIPRO has a new name, MetaStar, which reflects the major shift in emphasis that has taken place in peer review. We have changed from a highly structured control arm of government programs to a collaborative convener of those interested in improving health care. We analyze patterns of care and outcomes across health care providers, practitioners, and beneficiaries. We work in partnership with other individuals and institutions to achieve optimal health care for affected patients. The organization remains physician-oriented -- a majority of our Board of Trustees will be licensed physicians -- and our interactions with the Wisconsin medical community, via this column among others, will remain a vital part of our operation.

An estimated 48,000 Wisconsin Medicare beneficiaries have diabetes mellitus. Diabetes causes numerous systemic complications, and is a major cause of blindness in the United States. Early recognition and treatment of diabetic retinopathy can have a significant impact on reducing the incidence of blindness in the Medicare population. The presence and progression of diabetic retinopathy is related to the duration of disease, glycemic control and lipid abnormalities. The stages of diabetic retinopathy which, left untreated, have a poor prognosis are proliferative diabetic retinopathy (PDR) and macular edema (ME). Both of these stages are often asymptomatic well beyond the optimal treatment stage. The identification of ME requires a dilated funduscopic exam which can be performed by trained ophthalmologists or optometrists. Laser treatment has been shown to be effective in treating both PDR and ME.

The American Academy of Ophthalmology (AAO), in an educational program named Diabetes 2000, has addressed the high costs of diabetic retinopathy. The current cost of blindness to the federal government alone including Social Security, welfare, Medicare and Medicaid payments, rehabilitation, tax loss and tax expenditures is in excess of $14,000 a year for each patient. Cost-benefit studies recommend that all older onset diabetic patients have a routine dilated eye exam at least annually.

MetaStar's ultimate goal for the project is to decrease blindness from diabetic retinopathy. The first step was to initiate a pilot study with a single medical group; the project would then be modified as appropriate and expanded to other providers across the state. A large-sized medical group agreed to collaborate on this project.

A diabetic work group, was established, composed of primary care physicians, an endocrinologist, an ophthalmologist, a utilization review specialist, the education director and data analyst from the medical group staff. The mission statement of the group was to improve the percentage of diabetics receiving annual dilated retinal eye exams. MetaStar's project coordinator, associate clinical coordinator and data analyst attended these meetings and assisted as needed throughout the project process.

Two quality indicators were developed, with the goal of increasing the proportion of diabetics receiving annual dilated eye exams, based on guidelines published by the American Association of Ophthalmologists. The first quality indicator was the percent of eligible patients with documentation of an annual dilated eye exam. A second quality indicator was included to account for possible patient noncompliance: the percent of patients with no documentation of an annual eye exam who received a recommendation for one from their primary care physician.

The collaborator's work group and MetaStar staff developed the data collection tool. Data abstracted included gender and date of birth of the patient, determination of whether the patient was a Medicare beneficiary before the

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MetaStar Matters is not reviewed by the *WMJ* Editorial Board. Dr Gold is Senior Vice President and Principal Clinical Coordinator; Dr Blustein is Medical Director and Associate Clinical Coordinator; Ms. Miesbauer is Project Coordinator/Leader; and Ms. Halvorsen is Data Analyst, and all are associated with MetaStar. Reprint requests to Jay A. Gold, MD, JD, MPH, MetaStar, 2909 Landmark Place, Madison, WI 53713.

study period, documentation of a dilated funduscopic eye exam, and documentation of recommendations for a yearly dilated eye exam. Frequency and level of glycosylated hemoglobin, and frequency of foot exams were included in the abstraction tool, analyzed and evaluated as potential items for future projects for MetaStar and other medical groups.

Chart abstraction was done by a MetaStar nurse reviewer. The records were from internal medicine and family practice physicians. Only diabetics who were established patients of the medical group were included. Approximately 700 patients met the project eligibility criteria among its multiple clinics. Of those, a random sample of 150 patients was selected for inclusion in the project at baseline.

Results of the baseline analysis showed that only 30% of established diabetic Medicare patients had documentation of an annual dilated eye exam (Fig 1). However, an additional 17% had an eye exam without documentation of dilation. Another 6% of the sample who did not receive an eye exam were recommended by their primary care physician to obtain one (Fig 1). Ideally, this recommendation should be a referral to an ophthalmologist or to a diagnostic optometrist for a dilated fundus exam. The data clearly show an opportunity to improve on both quality indicators.

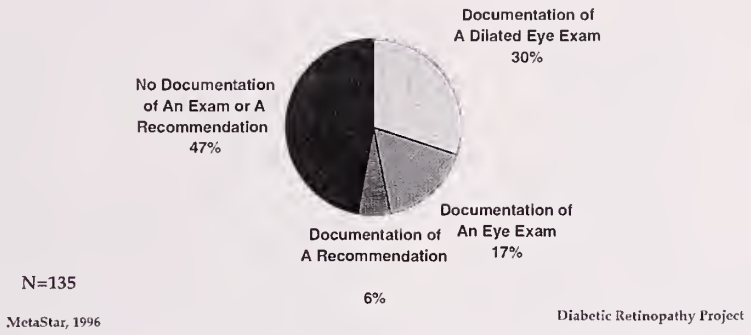
Feedback of the results of the analysis was presented to the collaborator's work group. They developed an improvement plan which was educational and directed at both the primary care providers and their patients. The results were shared with the entire medical staff through newsletters, meetings and Medical Grand Rounds with CME credits. Patient education was enhanced by seminars, posters, mailings and direct diabetes nurse educator interventions. The multifaceted approach toward improving the health care to the diabetic patients showed creativity and the group's commitment to the work group's mission.

At follow-up an additional random sample of 150 patients will be selected. The time frame for follow-up will consist of a complete year, July 1996 through June 1997. This time period began after the group's implementation of their improvement plan.

MetaStar is currently developing a broader diabetes improvement project. We are working together with Wisconsin Physicians Services (the Medicare carrier for Wisconsin) and the Wisconsin Diabetes Control Program of the Bureau of Public Health in this effort. We will expand the number of indicators and explore new strategies for improving the health care delivered to Wisconsin Medicare beneficiaries with diabetes. If you would like more information about this new project, please contact Chris Halvorsen at the address below or at (608) 274-1940. ❖

Figure 1.

Proportion of Study Patients with Documentation of An Eye Exam or A Recommendation to Have An Annual Eye Exam



Financial Fitness

Life Insurance and Taxes

Michael Dolan, CLU, ChFC, Madison

THE TAX LAW is so complex that, even though most life insurance proceeds aren't taxable, many people have questions. Perhaps the following will address some of your concerns.

I've been taking the dividends on my life insurance policy in cash every year. Now, I've been told that I should have been declaring these dividends on my federal income tax return and paying taxes on them. Is this true?

No, although a lot of people are confused about this. Life insurance dividends are actually considered a return of excess premium and are not taxable. If you leave the dividends with the insurance company to earn interest, however, that interest is taxable and will be reported to the Internal Revenue Service by the insurance company.

Before you continue taking the dividends in cash, however, you might want to consider your other options. Using the dividends to purchase additional paid-up insurance, for example, is a painless way to acquire more life insurance. This also eliminates taxable interest while still accumulating additional cash value. Using them to pay premiums instead reduces your out-of-pocket expenses each year. Your life insurance agent can provide details.

One of my options under the life insurance policy my late husband carried is to take the proceeds in installments.

If I do so, will it affect the tax treatment of the insurance?

The death benefit itself is not taxable, no matter how you take the proceeds, but interest on installment payments (which spouses could previously take tax-free in amounts up to $1,000 a year) is now fully taxable under the Tax Reform Act of 1986.

If I cash in my life insurance policy, will I have to pay income taxes on the money I receive?

Only to the extent that the amount you receive exceeds the amount you've paid in premiums over the years, minus dividends. But if you were to leave the policy in force until the proceeds are paid as a death benefit, this money will never be taxed. Before you cash in the policy, think about your reason for doing so. If you simply can't afford to keep paying premiums, one option is to "freeze" the policy, taking a lower face value (but retaining some insurance) in exchange for no more premiums. Or, if it's a matter of a temporary need for cash, you might want to take a loan against the cash value and keep the policy in force. Talk to your insurance agent about specific options under your policy. ❖

Michael Dolan, CLU, ChFC

SMS Presents Medicaid Task Force Report to DHFS

Doctors Ulmer and Ness recently presented the Department of Health and Family Services with the final report of the SMS Medicaid Task Force. The SMS convened a diverse group of physicians, clinic administrators, and Wisconsin Hospital Association representatives to develop innovative ideas and strategies to restructure the state's Medical Assistance program to optimize patient access, maximize program cost-effectiveness, and to assure equitable provider reimbursement.❖

Pictured left to right: Kevin Piper, Administrator, Division of Health; Richard H. Ulmer, MD, SMS President; Nancy Ness, MD, Chair of SMS Medicaid Task Force; and Joe Leean, Secretary, DHFS.

SMS Seminars Department Gives Members Chance to Question HMOs

The SMS Education and Meeting Services department completed a successful series of managed care seminars around the state during the month of September. Approximately 500 physicians, medical group managers and office staff participated. The seminar, titled "Face to Face with Wisconsin HMOs," offered participants the opportunity to ask questions of a panel of local HMO representatives.

The primary concerns that emerged at every seminar site included the increase in paperwork created by the HMOs policies and procedures, the overwhelming task of differentiating between health plans and the lack of understanding patients have about their coverage. The HMO representatives were receptive to participant comments and suggestions and plan to make changes wherever possible.

The SMS will continue to work with the HMOs in offering educational opportunities to assist you in the coming year. Watch for more information in the mail or check our web page (at www.wismed.com) for upcoming seminars. **For more information, contact Tamara Larson at the SMS 1-800-362-9080 ext. 388, or by e-mail at: TAMARAL@SMSWI.ORG.**

County Society News

Dane. Dane County Medical Society approved the following for membership: Neal Janquart; Michael Zolinski; Leah Berg; Joshua Modder; Marc Myer.

Fond du Lac. Fond du Lac approved the following physician for membership: Theodore Muller, MD.

Iowa. The following physicians were approved for membership in the Iowa County Medical Society: Adam F. Dachman, DO and Gary J. Grunow, MD.

Kenosha. The following physician was approved for membership in the Kenosha County Medical Society: Rosanna M. Ranieri, MD.

Langlade. Langlade County Medical Society approved membership for James A. Leek, MD.

Marathon. The following physicians were approved for membership in the Marathon County Medical Society: Mine Oya Ozkazanc, MD; Erik P. Anderson, MD; Shekar Kurudi Chandra, MD.

Outagamie. Travis L. Kroner, MD was approved for membership into the Outagamie County Medical Society.

Racine. The Racine County Medical Society approved the following physicians for membership: Stuart A. Fox, MD; Bruce I. Harrow, MD; Todd A. Loehrl, MD; William F. Nicholson, MD; Sheela L. Lahoti, MD; Min S. Par, MD; Anthony J. Park, MD; Fernando F. Rustia, MD.

Sauk. David J. Thompson, MD was approved for membership into the Sauk County Medical Society.

Sheboygan. Sheboygan County Medical Society has approved the following physicians: Richard Chase, MD; Albert Valicenti, MD; and Suzanne Grimm,MD.

Trempealeau-Jackson-Buffalo. The following physicians have been approved for membership into the Trempealeau-Jackson-Buffalo County Medical Society: Howard F. Spegman, MD; W. Bradford Martin, MD; Rick William Stoughton, MD; Thomas Screncok, MD.

Washington. The Washington County Medical Society has approved membership for the following physicians: Gregory G. Blommel, MD; Angela J. Breckenridge, DO; Keith R. Martin, MD; David S. Phillips, MD; Thomas Wall, MD; Jay B. Winston, DO.

Waukesha. Waukesha County Medical Society has approved membership for the following: Mary Ann Mikus, DO; Susan K. Hunter, MD; David J. Rypkema, MD.

Winnebago. The following were approved for membership into the Winnebago County Medical Society: Kevin Green, MD; Pamela House, MD; James Wright, MD.❖

AMA Awards

The Wisconsin physicians listed below recelty earned AMA Physician's Recognition Awards for November, 1996. They have distinguished themselves and their profession by their commitment to continuing education, and the SMS offers them its congratulations. The * indicates members of the SMS.

* Aufderheide, John F.
* Brodkey, Frank D.
* Gerson, Robert M.
Giangarra, Charles E.
* Gnadt, Gregory J.
* Jimenez, Miguel A.
Kafalghazal, Samer A.
* Kile, Patti A.
* Korte, Stephen A.
* Kwasny, Gregory P.
* Maski, Ravikant
* O'Connor, Thomas A.
* Pagedas, Tony G.
* Peterson, Stanley E.
* Potts, Carol A.
Riegg, Susan J.
* Searles, Paul A.
* Sherkow, Larry H.
* Singh, Rupinder
* Trader, Jospeh E.
* Vangor, Donald W.
* Viswanathan, Kanchana
* Zastrow, Raymond J. ❖

Physician Briefs

Conrad H. Benoit, DO,* an internal medicine specialist, opened a Waupun-based practice. He earned his medical degree from the Kirksville College of Osteopathic Medicine and completed his internship and residency in internal medicine at Saint Elizabeth's Medical Center in Boston, Mass. Dr Benoit sits on the board of directors of the Wisconsin Brain Injury Association. He is a member of the American Medical Association, Dodge County Medical Association, the American College of Osteopathic Family Physicians, and the American Association of Physician Specialists.

David Bihrle, MD,* an obstetrician/gynecologist, joined the medical staff at Marshfield Clinic-Rice Lake. Dr Bihrle earned his medical degree from the University of Minnesota Medical School in Minneapolis and completed his residency in obstetrics/gynecology at Santa Clara Valley Medical Center in San Jose, Calif.

John F. Brennan, MD,* a nephrologist, recently joined the All Saints Medical Group. Dr Brennan is board eligible in nephrology. He is a graduate of the University of Health Sciences/The Chicago Medical School, North Chicago, Ill and completed his residency in internal medicine and a fellowship at Loyola University, Maywood, Ill.

Michele Byron, MD,* an obstetrician/gynecologist, joined the staff at Marshfield Clinic-Rice Lake. Dr Byron earned her medical degree from Baylor College of Medicine in Houston, Tex and completed her residency in obstetrics/gynecology at Santa Clara Valley Medical Center in San Jose, Calif.

Ethan Carlson, MD, * a family practice physician, joined the medical staff at Medical Associates of Baraboo. He earned his medical degree from the University of Iowa College of Medicine in Iowa City and completed his internship and residency at the Mount Carmel Family Program in Columbus, Ohio.

Kristina Drehobl, MD,* a family practitioner, joined the staff at St. Mary's Medical Clinic. Dr Drehobl earned her medical degree from the University of Cincinnati College of Medicine in Ohio and completed her residency at the St. Mary's Hospital Family practice program in 1996.

Suzana I. Dudley, MD,* a family practitioner, joined the medical staff at All Saints Medical Group. She is board certified in Family Practice. Dr Dudley is a graduate of the University of Wisconsin Medical School, Madison and completed her residency at St. Michael's Hospital in Milwaukee.

Paul Erickson, MD,* a family practice physician, joined the medical staff at Iola Family Practice. Dr Erickson earned his medical degree from the University of North Dakota-Grand Forks. He completed his residency in Fargo, ND and previously practiced family medicine in Walker, Minn and Jamestown, ND. Dr Erickson is board certified in family practice.

Leslie M. Fox, MD,* a pediatrician, recently joined the All Saints Medical Group. Dr Fox earned her medical degree from Stritch School of Medicine, Maywood, Ill and completed her residency in pediatrics at Madigan Army Medical Center, Tacoma, Wash. She is board certified in pediatrics.

Stuart A. Fox, MD,* an obstetrician and gynecologist, joined the medical staff at All Saints Medical Group. Dr Fox earned his medical degree from Loyola University Stritch School of Medicine in Maywood, Ill and completed his residency in obstetrics and gynecology at St. Joseph Hospital in Denver. He is board eligible in obstetrics and gynecology.

John A. Gordon, MD, pediatric intensive care specialist, has been appointed associate professor of pediatrics at the Medical College of Wisconsin. Dr Gordon practices medicine at Children's Hospital of Wisconsin and is a Diplomate of the American Board of Pediatrics in pediatrics and pediatric critical care medicine. He also served as associate professor pediatrics and pediatric intensivist at the University of Maryland in Baltimore prior to joining the Medical College of Wisconsin. Dr Gordon earned his medical degree from McGill University in Quebec, Canada. He completed a pediatric care fellowship at Johns Hopkins University School of Medicine in Baltimore, Md and a pediatrics residency at the Montreal Children's Hospital, McGill University.

Cetin Hekimoglu, MD,* an internist, joined the medical staff at All Saints Medical Group. He completed his residency in internal medicine at the Medical College of Wisconsin Affiliated Hospitals in Milwaukee. Dr Hekimoglu is board certified in internal medicine.

Jennifer Kaufman, MD,* a family practice physician, joined the staff of Physicians Plus-McFarland. She earned her medical degree from Mayo Medical School in Rochester, Minn and completed her internship and residency in family

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medicine at the Mayo Graduate School of Medicine in Rochester.

Joseph Krien, MD,* a family practice physician, joined the medical staff of West Salem Clinic. He earned his medical degree from the University of Wisconsin, Madison and completed his residency at the Franciscan Skemp Healthcare Family Practice Residency Program. Dr Krien is a member of the American Medical Association, the American Academy of Family Physicians.

Wendy Larson, MD,* a neuromuscular specialist, joined the faculty of the Medical College of Wisconsin as assistant professor of neurology, director of the neurology residency program and co-director of the neuromuscular program. She will also coordinate the Muscular Dystrophy Association Clinic at Froedtert Hospital, a teaching affiliate of the Medical College. Dr Larson will continue practicing with the Medical College Physicians and Clinics at Froedtert Hospital. She earned her medical degree from the University of Chicago in Ill and completed her fellowship in neuromuscular disease and electromyography and a neurology residency at the University of Michigan Hospitals in Ann Arbor. She is board certified in psychiatry and neurology.

Albert T. Leung, MD,* an internist, joined the staff of All Saints Medical Group. He earned his medical degree from the University of Iowa College of Medicine, Iowa City and completed his residency in internal medicine at Beth Israel Hospital in Boston, Mass with a fellowship in endocrinology from Massachusetts General Hospital and a fellowship in medicine from Harvard Medical School, Boston.

Todd A. Loehrl, MD,* an otolaryngologist, joined the medical staff at All Saints Medical Group. Dr Loehrl earned his medical degree from the Medical College of Wisconsin in Milwaukee and completed his residency in otolaryngology at the Medical College of Wisconsin. He is board eligible in otolaryngology.

Paul Mannino, MD,* a family practitioner, joined the medical staff at the Milton Clinic. Dr Mannino earned his medical degree from the University of Wisconsin-Madison and completed his internship and residency at the Medical College of Wisconsin, Waukesha Family Practice Residency Program in Waukesha. He is board certified in family practice.

Maryanne K. Miller, MD,* an internist, joined the staff at All Saints Medical Group. Dr Miller earned her medical degree from the University of Minnesota Medical School in Minneapolis and completed her residency at Case Western Reserve University/University Hospitals in Cleveland, Ohio. She is board eligible in internal medicine.

William F. Nicholson, MD,* a family practice physician, joined the medical staff at All Saints Medical Group. Dr Nicholson earned his medical degree from George Washington School of Medicine in Washington, DC and completed his residency at the University of Nebraska in Reno. He is board certified in family practice.

John M. Oscherwitz, MD,* an internist, joined the medical staff at All Saints Medical Group. Dr. Oscherwitz earned his medical degree from the University of Cincinnati College of Medicine in Cincinnati, Ohio and completed his residencies at the Loyola University Medical Center in Maywood, Ill and the University of Kansas Medical Center in Kansas City. He is board certified in internal medicine.

Jennifer Pearson, MD,* a family practice physician, joined the medical staff of Physicians Plus-McFarland. She earned her medical degree from the University of Minnesota School of Medicine in Minneapolis and completed her internship and residency in family medicine at the University of Wisconsin and St. Mary's Hospital. Dr Pearson served as chief resident during her final year.

Anthony V. Pisciotta, MD, a blood specialist, was recently honored by the Medical College of Wisconsin for his contributions to the study of blood disorders. Dr Pisciotta is a Robert A. Uihlein Jr. professor at the Medical College of Wisconsin. He is a leading authority on blood disorders including leukemia, anemia and bleeding problems. Dr Pisciotta discovered Hemoglobin M and participated in the development of a new effective treatment for thrombotic thrombocytopenic purpura (TTP).

Bridget D. Roots, MD,* obstetrician/gynecologist, joined the medical staff of All Saints Medical Group. Dr. Roots earned her medical degree from the Albert Einstein College of Medicine in Bronx, NYand completed her residency in obstetrics and gynecology at Brookdale Hospital in Brooklyn, NY. She is board certified in obstetrics and gynecology.

Steven J. Ryder, MD,* surgeon, joined the medical staff of All Saints Medical Group. Dr. Ryder earned his medical degree from the Medical College of Wisconsin in Milwaukee and completed his residency in general surgery at the Hennepin County Medical Center in Minneapolis, Minn. He is board eligible in surgery.

Bradley Schnee, MD,* a family practice physician, joined the medical staff of the Medical Associates of Baraboo. He earned his medical degree from the University of Minnesota and completed his residency at the University of Minnesota and Fairview Riverside Hospital in Minneapolis, Minn. Dr Schnee also worked as a physician assistant for four years prior to attending medical school.

Ronald L. Smits, MD,* dermatologist, joined the medical staff of All Saints Medical Group. Dr. Smits earned his medical degree from the University of Wisconsin Medical School in Madison. He completed his residency in dermatology at the University of Wisconsin Hospitals and Clinics in Madison with a fellowship in tropical medicine at Louisiana State University and the National Institutes of Health. Dr Smits is board certified in dermatology.

Barry Spiegel, MD, an addiction specialist, recently joined the staff at Mercy Options-Comprehensive Mental Health and Treatment Service where he will serve as Medical Director of Addiction Programs. He earned his medical degree from New York College of Osteopathic Medicine in Old Westbury, NY and finished an internship at Metropolitan Hospital-Central Division in Philadelphia, Pa, and a family practice residency at JFK Hospital in Stratford, NJ. He also completed a fellowship in addiction medicine at the Medical College of Wisconsin.

Richard L. Stoltenberg, MD,* surgeon, joined the medical staff of All Saints Medical Group. Dr Stoltenberg earned his medical degree from the University of Illinois College of Medicine and completed his residency in general surgery at the University of Wisconsin Hospitals and Clinics in Madison. He is board eligible in surgery. ❖

Obituaries

Doyle, Thomas J., MD, an eye, ear, nose and throat specialist from Superior, died November 1, 1996. He earned his medical degree from the University of Minnesota, Minneapolis, Minn in 1934. He completed his internship at St Mary's Hospital, Duluth, Minn and post graduate work at the New York Eye and Ear Hospital in 1936. Doctor Doyle practiced medicine in Superior for over 50 years. He also served as chief of staff of the former St. Joseph's, St Mary's and Superior Memorial hospitals. Dr Doyle was a member of the Douglas County Medical Society and the State Medical Society Fifty Year Club. He served on the SMS Board of Directors, formerly called the Council, from 1969-1977.

He is survived by his wife, Mary Alice; four children, Thomas Doyle Jr., MD, a urologist in Eau Claire; Matthew Doyle of Bloomington, Minn; Mary Alice Sullivan of Richfield, Minn, Ann Molter of Brooklyn Park, Minn; 12 grandchildren (one of whom, Shannon Doyle, recently graduated from the Medical College of Wisconsin) and one great-grandchild. Medicine has played an important role in the Doyle family: Besides the son and granddaughter who are physicians, Dr Doyle's father-in-law, Thomas J. O'Leary, MD, served as President of the State Medical Society from 1934-1935.

Montgomery, Robert P., MD, 95, an orthopedic surgeon from Milwaukee, died November 3, 1996. He earned his medical degree from the University of Michigan in 1928 and completed his residency and internship at the University of Michigan Hospital . Dr Montgomery was a member in the Medical Society of Milwaukee County, State Medical Society, American Medical Association, Fellow in the American College of Surgeons, Fellow in the American Academy of Orthopaedic Surgeons, American Orthopaedic Board and LeRoy Abbott Orthopaedic Club, Wisconsin Orthopaedic Society and the Clinical Orthopaedic Society. He is survived by his wife, Florence; three children, Sandy Mueller of Shorewood; Ann Entwistle of Sioux Falls, SD; and Mary Buckpitt, of Davis, Calif.

Schultz, Alwin, MD, 73, an obstetrician/gynecologist from Madison, died August 6, 1996. He earned his medical degree from the University Wisconsin-Madison in 1948 and completed his internship and residency at Wisconsin General Hospital. Dr Schultz was a Navy veteran of World War II and an Air Force veteran of the Korean War. He was a member of the Dane County Medical Society, State Medical Society, Central Association of Obstetrics and Gynecology, Madison Obstetrics-Gynecology Society, the Milwaukee Gynecological Society, and the American College of Obstetrics and Gynecology. Dr Schultz is survived by his wife, Joan; three children, Richard Schultz; Thomas Schultz; and Mrs. Richard Merson.❖

Wisconsin Medical Journal instructions to authors

Authorship

Manuscripts are considered with the understanding that they have not been published previously and are not under consideration by another publication.

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3. The author should be the conference chair (or designee).
4. The report should focus primarily on what is "new and important" that can and should be used by the reader.
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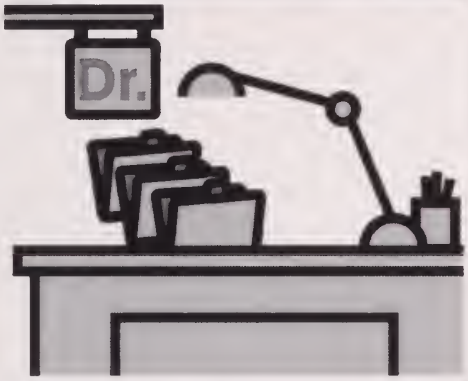

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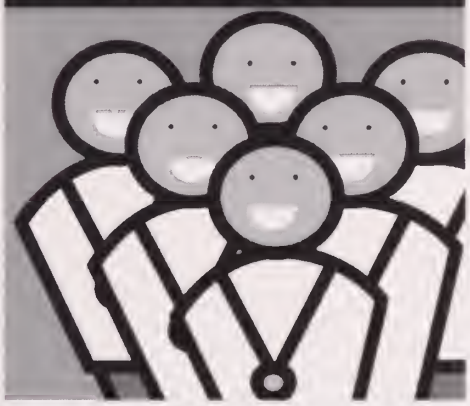

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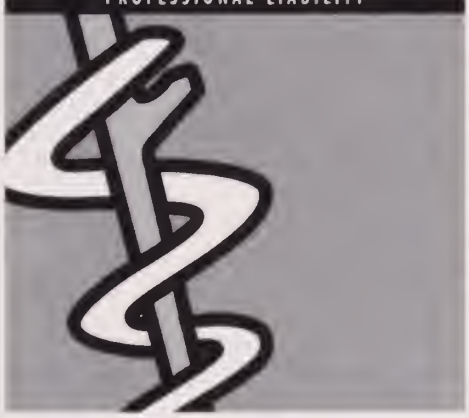

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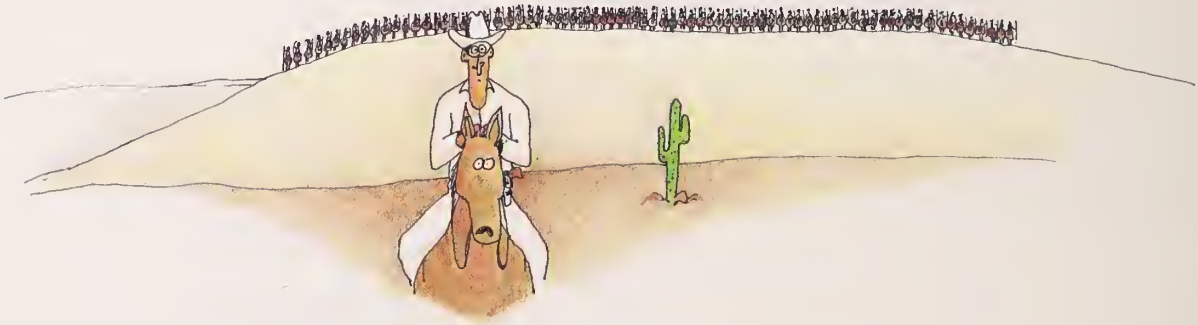

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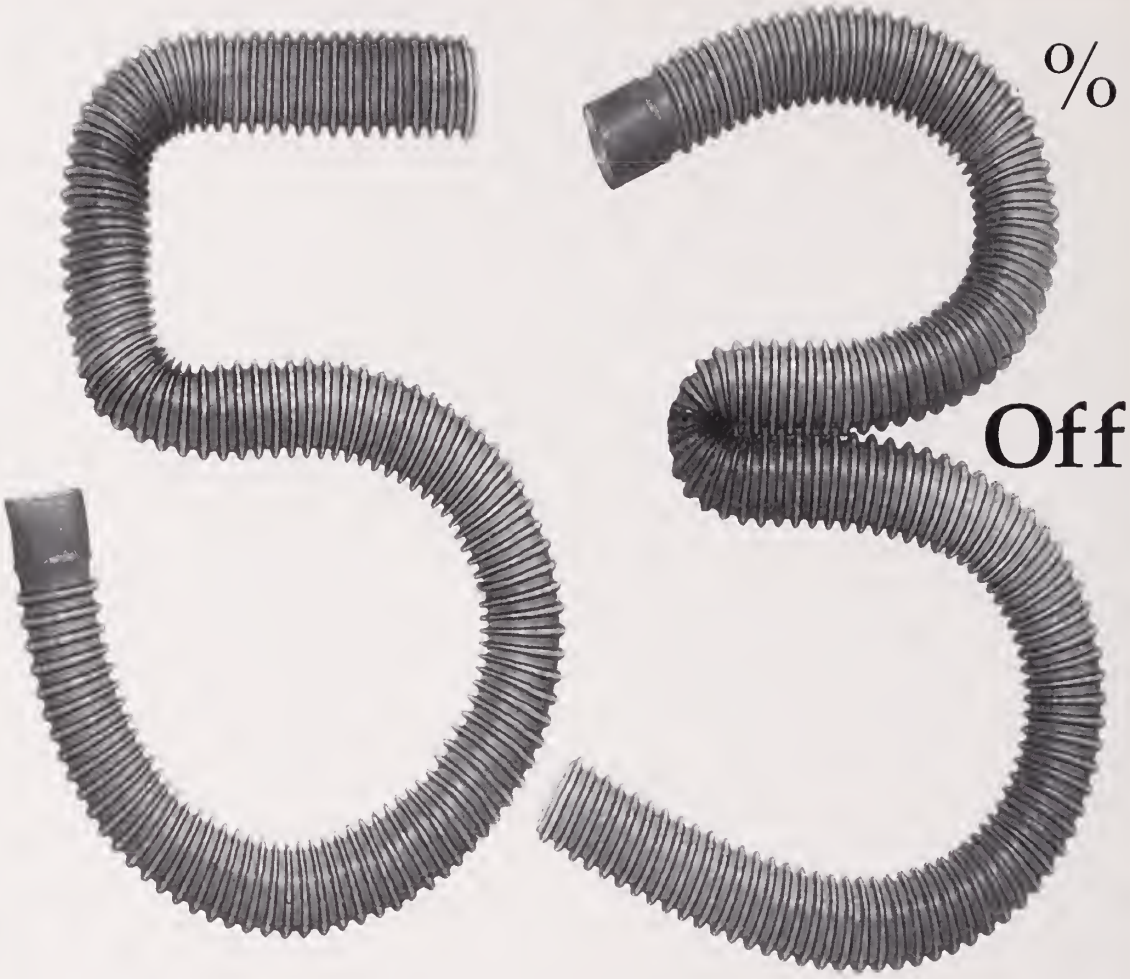

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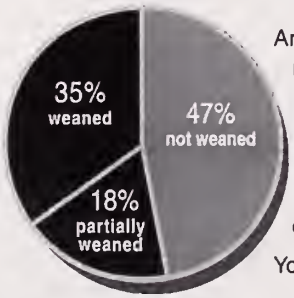

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Our cover: The angel has long served as a symbol equated with protection and deliverance. This issue of the *WMJ* looks at treating the terminally ill and how we can improve the care of the dying. Physicians, for many terminal patients and their families, may become a symbol of protection and deliverance by offering hope for humane and compassionate care at the end of a life.

The cover photo, taken by Randy Gunter, was provided courtesy of Gunter Communications in Madison.

Related articles begin on page 5 and are indicated in the Table of Contents with the following: These articles can also be found on WISMED, the State Medical Society's world wide web site at: http://www.wismed.com.

EVP Report
Ensuring Our Government Works for Us

How time flies. It seems like only yesterday that I wrote my first EVP report to you. Three months later I am continuing my travels around the state trying to meet as many of you as possible.

Part of what will keep me busy this winter will be introducing myself to as many state legislators as possible. As a former legislator, I can not stress enough the importance of building positive relationships with our elected officials. It's comforting to have someone to turn to when you need advice or guidance on an issue. With so many groups vying for our legislators' attention, it is imperative that we, as a society, serve as that guide on health-related issues.

The 1997-1998 legislative biennium promises to be another busy and challenging term for the SMS. We will be tackling many issues ranging from our version of the Patients Protection Act (PPA) and medical assistance reimbursement to public health issues such as tobacco control.

At its January meeting, the SMS Board of Directors endorsed the PPA which will be introduced in the legislature in the near future. The PPA is an initiative to assure fairness and choice to patients and providers under health care plans. It will empower patients if they know exactly what is included in their particular plan.

The SMS will also be working to support legislation that will allow for annual inflationary increases for reimbursement rates for those physicians who treat Medical Assistance patients. In addition, at the request of Governor Thompson, our Medical Assistance Task Force will continue studying ways to improve the Medical Assistance program.

The SMS also realizes we have a responsibility to promote good public health and safety measures. Of course, we will proceed with our campaign to reduce juvenile and adult smoking. We will do this through initiatives such as supporting a $1 increase in the state cigarette tax, banning the use of cigarette vending machines and promoting smoke free environments in all enclosed public places.

So our work has just begun. Our first goal is to meet our legislators and educate them on key health issues facing our state. Fortunately, we have a great opportunity to do just that. On **March 12** the SMS is sponsoring its annual **Legislative Day** in Madison at the Concourse Hotel. You are all invited to attend as are other health care professionals from around the state, elected officials, legislative staff and other state administrators. Supreme Court Chief Justice Shirley Abrahamson will be the keynote speaker.

Not only is it vital to personally meet with our representatives, it is important that we support them for their efforts in assisting the medical profession and patients of Wisconsin. One way to do this is through WISPAC, the political action committee (PAC) sponsored by the State Medical Society. WISPAC is a voluntary, nonprofit and nonpartisan organization.

Elected officials remember those who support them. Whether you host a fundraiser, campaign door-to-door, write a letter to the editor or donate to a campaign, chances are your representative is likely to listen to your concerns in the future. As a Society we must band together so we have a strong, representative voice in the state legislature. We can only have this voice if

John E. Patchett, JD
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we elect representatives who are supportive of our mission.

WISPAC can do a lot of this groundwork for you. Your donations will assist our organization in overseeing endorsements, making political contributions and increasing political education. We also encourage you to partake in the Physicians for Better Government (PFBG) direct-giver program. This conduit program allows you to earmark funds to be given as an individual to selected candidates.

I strongly urge you to become active in the many political activities SMS will be focusing on this year. I am excited for the opportunities we have in strengthening our political voice. For more information on how to become involved with promoting our legislative agenda, by attending the SMS Legislative Day or participating in WISPAC or PFBG, contact Mike Kirby at SMS ext. 260 or via e-mail at: MIKEK@smswi.org. Be sure to regularly check WISMED and *Medigram* for updates.

Remember, our issues will only be heard when our legislators hear from us.❖

President's Page
Thoughts About Treating the Terminally Ill

In an earlier era, when infectious diseases and trauma and now-preventable diseases such as acute rheumatic fever and glomerulonephritis were responsible for a much higher proportion of deaths than is now the case, Thomas Addis, a distinguished physician of his time (who is now memorialized by the Addis count used to quantify abnormalities of the urinary sediment), wrote of the physician's responsibility in dealing with the inevitable death of the patient with chronic glomerulonephritis. "When the disease has progressed to this point, it is the cue for the physician to move to the wings to observe the final act of the drama being played out."

Times have changed, and so has medical practice, and we now have a far richer armanetarium of treatments to offer our patients. But even so each person comes to the end of life, and the majority of these deaths are not abrupt, but rather are preceded by an illness of a length sufficient to allow the attendance of a physician and the provision of medical care to the patient.

In 1963, Dr Hughes Day of Kansas City established the first coronary care unit. Subsequently, medical and surgical intensive care units were created, and then trauma and life support centers, all drawing upon the technological advances of the space era and the lessons in care of the critically ill drawn from the medical experiences of the Korean War and the early stages of the Vietnam War. Fortified with this knowledge, physicians were able to save patients and return to useful lives patients who in earlier times would have died from their acute illness. These same advances however, were also applied to patients whose deaths had become apparent as being inevitable and whose lives could not be saved no matter how much technology was brought to bear.

Physician reluctance to withdraw treatment in these situations played a large role in the movement that resulted in living wills and health care power of attorney. It is now a common event for patients to talk to us physicians about their wishes for prolonged care prior to the initiation of treatment.

There remains the group of patients whose death is inevitable from a disease process beyond our ability to arrest or reverse. It is this group of patients who have been the impetus behind the current right-to-die movement.

The only country which has any documented experience with euthanasia and physician assisted suicide (PAS) is the Netherlands. In that country, euthanasia and PAS are not legal. The government, however, does not prosecute a physician involved in euthanasia or PAS if well-defined criteria including consultation with another physician are followed. In a study published in 1991 in *Lancet*, van der Maas, *et al* found that intractable pain was a less frequent trigger for seeking euthanasia or PAS than was the combination of fear of dependency, fear of becoming an economic burden on the family, and despondency. Their statistics disclosed that euthanasia was done in 1.9% of deaths reviewed in a prospective study, six times more frequent than PAS. Even more chilling was the report that 0.87% of all deaths were so-called LAWER (Life-terminating Acts Without Explicit Request). In our country, a LAWER could be considered a MURDER. These numbers are basically similar to data published in the November 28, 1996 issue of the *New England Journal of Medicine* (1996; 335:1699-1705) by the same group in a follow-up study.

"Hospice must be more widely available and more fully utilized. By these means, we physicians can maintain our roles as healers. . ."

Richard H. Ulmer, MD

The use of high dose opiates, given either orally or by intravenous drip controls the pain of the vast majority of patients whose final illness is associated with extreme pain. It is incumbent upon us as physicians to be familiar with the proper doses of these opiates, the use of rescue doses which are 50-100% greater than the standard dose to control breakthrough pain, and the concept of rapid upward titration of doses by 30% to 100% a day to gain control of pain and keep it suppressed.

Hospice must be more widely available and more fully utilized. By these means, we physicians can maintain our roles as healers and comforters, and can avoid the inherent contradictory situation wherein society allows doctors to be killers as well as healers.❖

Guest Editorials
Right-to-Die

Fred Risser, Wisconsin State Senator

TERMINALLY ILL PERSONS cannot choose an alternative to death. The issue is whether those who are mentally competent and know that their death is imminent should have the freedom to decide when and how to die. **(See related story on page 14.)**

In 1990, the US Supreme Court recognized a constitutional right to forego unwanted medical treatment. Living Wills, which allow competent adults to state their preferences on whether or not to permit the use of life-sustaining procedures in the event of terminal illnesses, are currently authorized in 47 states and the District of Columbia.

Surveys have shown that some physicians assist their patients in dying without the benefit of any rules or procedures defining when that may occur. When a patient has a long-standing association with a physician, it is certainly understandable that some doctors will assist in facilitating a patient's death, if asked.

Furthermore, the practice of a physician in hastening a patient's death through the administration of pain-reducing substances, such as morphine, is common in providing comfort to a dying person.

It seems appropriate that society, through its elected representatives, should develop safeguards to minimize the risk and abuse of practices which hasten one's death, and also guarantee one's freedom of choice on this subject. Failure of society to provide strict guidelines only encourages the Dr Kevorkians of the world who create and live by their own rules!

Those opposed to any legislation on this subject argue that laws authorizing death with dignity could lead us down the "slippery slope" to euthanasia or result in undue social or economic pressure on the elderly, poor or vulnerable of our society to prematurely end their lives.

The answer is to regulate against such potential abuses, not shut off the rights and desires of competent, terminally ill adults.

I have introduced legislation that will allow a physician to comply with a patient's desire for death with dignity in the most limited and narrow of circumstances.

The proposal contains stringent safeguards. A mentally competent adult who has been judged terminally ill by two physicians may voluntarily make a written, retractable request to his or her attending physician for medication for the purpose of ending his or her life in a humane and dignified manner. The requester must first make the request orally, and then again in writing. This written request must be signed and witnessed by three persons. There must then be a further oral request to the doctor, after which the doctor may write a prescription for the requested medication. The physician may or may not be present when the requester self-administers the medication.

If, in the opinion of the attending physician or the consulting physician, a requester may be suffering from a psychiatric or psychological disorder that causes impaired judgement, the requester will be referred for review and counseling to a psychiatrist or psychologist who will determine and certify in writing that judgment has not been impaired by such a disorder before a request for medication is fulfilled.

Senator Fred Risser (D-26)

I feel the bill sets forth a series of guidelines and regulations that will protect society and also provide an option for those individuals who wish to use it.

There is enormous public support on this issue. A majority of the voters in the state of Oregon supported death with dignity in a state ballot initiative in November 1994, despite strong opposition by the American Medical Association, the Catholic Church, and both the Democrat and Republican candidates for Governor. In a 1993 Harris poll, 73% supported aid in dying. My own poll taken in 1995 in

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Wisconsin State Senator Fred Risser is the current President of the Senate. Risser serves on the Judiciary, Campaign Finance Reform and Consumer Affairs Committees and is an ex-officio member of several joint committees and commissions. Senator Risser is also a practicing attorney; he lives in Madison.

which 9,000 persons participated had 74% responding "yes" to the question: "Would you support physician assisted aid in dying when requested in writing by a competent terminally ill individual?"

Society must continue to evaluate and address related issues such as pain control, providing health care for all, and depression and social isolation of persons who are older or disabled. Aid in dying must not be an alternative to quality home care, or access to a licensed hospice. Individual choice and the desire to die peacefully are the foremost reasons in support of death with dignity legislation.

Regardless of one's feelings about death with dignity, it is an issue in which society is involved, whether it wants to be or not. The US Supreme Court is reviewing the constitutional arguments after lower federal and state court decisions resulted in conflicting viewpoints. Dr Kevorkian is operating under his own rules. Certainly, the time has come to discuss this matter logically and impartially, if possible, with the goal of reaching some sort of consensus. ❖

THE UNIVERSITY OF CHICAGO MEDICAL CENTER

Because medicine is no longer a solo event...

Pain and Sleep

Edward S. Friedrichs, MD, Brown Deer

In this "The Decade of the Brain" we are responsible to enlist the frontiers of neuroscience into our quest for better health care. Sleep medicine research is just such a frontier. Our clinical approach to pain management will profit by integrating insights from sleep neurophysiology.

As a practicing internist and addictionologist I have had to give serious thought to the dilemma of chronic pain, especially cancer pain, and narcotics. I am not afraid of "addicting" a truly terminally ill patient. **(See related story on page 20.)**

What I am afraid of is that the general physician *and* oncologist are not fully aware of the deteriorating effect of narcotics on the brain. Due to my lengthy curiosity and training in sleep medicine, my addiction practice has taught me some very useful facts.

Narcotics, per se, destroy normal recuperative sleep physiology, rendering the patient, whether "addicted" or not, into a severe state of agonizing sleep deprivation. Opiates of all types have recently been found to specifically suppress REM-stage sleep. Acute and chronic pain go hand-in-hand with sleep disturbance. Patients with acute pain safely delay restoring their sleep until the pain recedes in a few days. Those in chronic pain have no such luxury. Most patients with chronic pain suffer from agonizing insomnia, at times even before the onset of the pain pattern(s). The vicious circle of insomnia→pain→insomnia→pain becomes inevitable.

Chronic muscle tension, recurrent headaches, arthralgias, neuralgias, bone pain, sympathetic dystrophy, thalamic pain, all coincide with prolonged disturbed sleep. Patient histories document sleeplessness, often even before the onset of the pain. Lifestyles are marked by compulsive, exhausting effort and will power.

How does our therapeutic approach to chronic pain management affect sleep physiology? Which approaches potentiate sleep and which neglect sleep? Does neglecting restorative sleep intensify and spread chronic pain into new and intolerable patterns? How much sleep destruction can the human brain, mind and emotions survive? Can we relieve pain and potentiate normal restorative sleep at the same time?

Usually the first order of pain treatment in our armamentarium is narcotic analgesia. But what do narcotics do to sleep? Recent neuro-research finds that narcotic drugs routinely suppress REM-Stage sleep. Is this harmful? The answer lies in our unfinished business of understanding the functions of REM-sleep.

Current theories suggest that REM-Sleep potentiates learning and forgetting, resolves emotional conflicts and relaxes muscles, in a way that no other natural state of consciousness can. In utero and early childhood, REM-sleep predominates. Experimental REM deprivation in animals and humans escalates the innate drives of appetite, sexuality and aggression. Obesity, promiscuity, violence and sudden death can result from sleep/REM deprivation.

Edward S. Friedrichs, MD

Furthermore, severe REM deprivation seems to impair attaining another major restorative sleep stage, Non-REM slow-wave-sleep. Slow-wave-sleep organizes the growth hormones for anabolism and tissue healing. Slow-wave-sleep is lost in the aging process, in depression and in addiction to drugs, such as alcohol, barbiturates and narcotics. Antidepressant therapies -- medication, electroshock and exercise -- control REM-sleep and induce slow-wave-sleep.

Relieving pain with narcotics alone induces a progressive state of REM and sleep deprivation. Ask any narcotic addict trying to reduce and eliminate Methadone, his/her major symptom is fear of sleeplessness. Ask any chronic pain patient, his/her second-most fear is usually sleeplessness. Are we numbing the

Edward S. Friedrichs, MD, is a private-practice consultant on sleep disorders and addiction medicine, certified by the American Society of Addiction Medicine. From 1963-1993, he was a Clinical Professor with the Medical College of Wisconsin. He has worked with the Milwaukee County Mental Health Center, the DePaul Rehabilitation Hosptial and St. Luke's Medical Center Sleep Clinic. Dr Friedrichs is a member of the SMS Commission on Addictive Diseases. He may be reached at his office, 8076 N. 64th Street, Brown Deer, WI 53223; (414) 355-7100.

pain and destroying sleep? It appears likely. This sleep deprivation state becomes the cause of the escalating doses of narcotics. Sleep is not easily subverted without a fight. Narcotic withdrawal is fraught with devastating agitated insomnia.

Can we medicinally treat chronic pain and insomnia at the same time? We cannot with narcotics alone. We do not yet know how. Common hypnotics are useless, all are either ineffective or habit-forming. We are forced to use anti-depressants and/or neuroleptics in the best way we know how. My anecdotal successes have come from very low dosages of combined tricyclics and thioridazine, early in the course of chronic pain.

We must set the goal of developing the safest medicinal inducement of near-normal restorative sleep, the replacement of slow-wave and REM-sleep. We must attend to sleep impairment early in the course of all chronic disease and pain. We must recognize that the "psychic overlay" of most human disease encompasses the agony of sleep deprivation of both psychologic and organic origin.

The emotional, cognitive and behavioral consequences of sleep deprivation are devastating. We see it all around us, in our colicky infants, ADHD children, impulsive adolescents, violent adults, and even in our irritable selves. We can no longer be so cavalier about tending to sleep needs. The developing neuroscience of sleep medicine should not allow it. ❖

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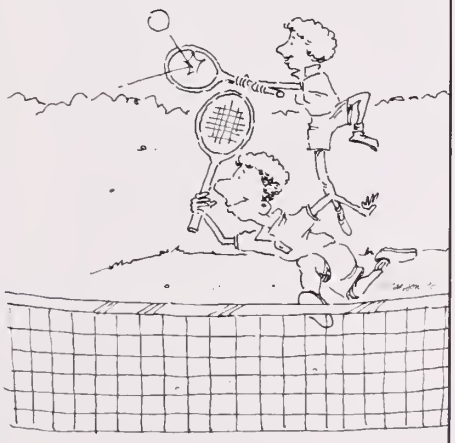

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The Caring Imperative

William E. Scheckler, MD, Madison

THREE ELDERLY PEOPLE loved by their families and friends died last year. These three people were all patients -- from the Latin root meaning "those who suffer." They were not "clients," they were not "health care consumers" and they most certainly were not "covered lives" to their doctors, nurses and families. They were dignified, elderly citizens of our country. I knew all three.

For two of them death came gently at life's normal end. Their last wishes were honored. While they would never have considered hastening life's end, they had long ago planned carefully for the inevitable. They gave powers of attorney to their designated, adult children and complete directives to their physicians. The third died in needless agony that could and should have been avoided.

The first patient we will call "Julia"-- not her real name. She was a widow. For over 30 years she lived alone, independently in her own apartment. Her overall health was good but her vision and hearing were gradually failing. Her mind and memory remained sharp even as her senses and mobility waned. Shortly after her 92nd birthday she fell and cracked her pelvis. After a hospitalization and an attempt at rehabilitation she improved somewhat, but was unable to regain full independence. She hired 24-hour in-home care. A year later, because of financial necessity, she moved to a nursing home.

Dr Scheckler is a Professor at the Department of Family Practice, UW Medical School and practices at St. Marys in Madison. He can be reached at (608) 263-3637 or by e-mail at: Wes@Fammed.wisc.edu.

Years earlier Julia had made known to her children her wishes about terminal care. She believed she had lived a long productive life and when the day came she would be ready to face death. Her family physician, her family, and the staff at the nursing home all understood her wishes. When Julia developed a fever and confusion her own physician was not available. Had the nurses phoned the "on call" physician he would have had her transported to the local hospital emergency room where she would have been admitted and treated. Instead, the nurses called the family member who had health care power of attorney and Julia stayed at the nursing home, where she was kept comfortable as she had wanted. Her family visited her the next day and were with her two days later when she died peacefully. Her wishes had been respected and fulfilled.

The second patient was an 84-year-old widow we will call "Kathryn." Her husband had died 20 years earlier. She had managed alone as a strong-willed and resourceful woman. But recently her memory began to fail. She managed to hide this from her family until she developed heart failure. After several attempts to live at home with some help it became clear that her heart problems and her Alzheimer's disease required protected care.

Fortunately, several years earlier, she had designated her daughter with health care power of attorney. Her daughter found a group home equipped and staffed to provide the needed care. The plan was to keep Kathryn as functional and comfortable as possible in her new environment and not to hospitalize her. Seven months later and shortly after a recreational drive past her old residence, she returned to the group home, slumped over in a chair, and died. 911 was not called. CPR was not performed. Kathryn died peacefully.

"Walter" was an 84-year-old retired physician, a self-made man, who cared prudently and well for his family throughout his life. He never got around to discussing with his family or his physician what they should do if he became gravely ill. His own mental faculties and those of his wife had begun to wane. He had been in and out of the hospital several times in the last six years with a ruptured appendix, a mild stroke and heart problems requiring a pacemaker. He resisted the suggestion of his family doctor that he give up driving.

At the age of 84, Walter suffered from a serious bout of flu and was hospitalized. Recognizing that he was seriously ill, his family asked him for power of attorney and he signed the needed documents. The next day, he suffered a complete organ failure and hospital staff placed him on life support systems without consultation with the family. They had no orders to the contrary. Shortly thereafter, his specialist physicians met with family and insisted that surgery was necessary because of possible bowel obstruction. Surgery was done and no bowel obstruction was found. The specialists involved in his care were using a time honored paradigm of medical care, the *Therapeutic Imperative* to "diagnose and treat all illness in all patients at all times." Walter, unfortunately, lingered on life support systems for two and a half weeks until finally family members were able to persuade the family physician to have these removed. Within a few days,

he slipped peacefully away.

The *Therapeutic Imperative* in medical practice and its more recent corollary the *Legal Imperative* subject countless terminally ill patients like Walter to protracted, senseless, expensive, final agonies.

The *Therapeutic Imperative* is the perceived necessity to always diagnose and treat illness as if life could last forever. It has its roots in this century's phenomenal advances in medicine's ability to deal with all manner of diseases. Scans of every part of the body can now define disordered anatomy and function. New medications and surgical procedures can arrest disease and prolong a life, though not always improve a life. This imperative has been the cornerstone of medical education the past fifty years.

The *Legal Imperative* has its roots in the adversarial system of our American legal process but has never been formally defined. In the spirit of the medical *Therapeutic Imperative* the legal profession has asserted that malpractice is committed if all available diagnostic means and potentially helpful therapeutic interventions are not used. Consequently the courts, lawyers and regulating agencies have become enmeshed in American medical care. Hospitals and nursing homes are told to be sure all patients who cannot make decisions for themselves have a proper legal guardian on hand to make decisions for them. Legal guardians appointed for some elderly patients may know nothing about the individuals they serve. A guardian may even veto the best advice of a physician who has cared for the same patient for many years. The public expects miracles. It insists on finding a person to blame if outcomes aren't perfect. Everything should be black or white. Relative risks, the shades of gray true in all biologic systems, are ignored.

The *Therapeutic* and *Legal Imperatives* have certainly benefitted some patients along the way. But they have also trapped patients like Walter. What is essential in the 1990s and beyond is a new paradigm that might be called the *Caring Imperative*, exemplified by Julia's and Kathryn's stories. The *Caring Imperative* puts diagnostic and therapeutic interventions in the context of the individual patient rather than basing decisions on an impersonal "practice guideline."

The *Caring Imperative* will always be informed by the values and ethics of the patient and of the larger society. Neither good science nor good law should be ignored. But the central word is *caring* in the context of the best science available and prudent law.

The *Caring Imperative* is relevant for all patients but particularly for the elderly nearing life's end and to patients with debilitating progressive neurologic and degenerative diseases. In terminal illness, providing comfort should be the principal goal. This new imperative emphasizes the importance of communication with family about future events -- about "advanced directives" and planning for terminal medical conditions. Quality of life and living are paramount considerations.

Crucial questions about when to go to the emergency room or to the hospital and when to stay at home or at the nursing home need to be addressed in advance directives. Impending death does not always require a call to 911. Even in the hospital the patient's needs and wishes must be understood and respected. Experimental protocols of medications and surgeries with little known chance for success are rarely appropriate.

It would have been easy for the first two stories to have ended like Walter's. The *Therapeutic Imperative* would have ordered hospitalization for Julia and cardiac resuscitation for Kathryn. Both of these elderly women could have lingered for days or weeks in misery, kept alive solely by modern medical technology. That this did not happen was due to good communication and planning by the patients, their families and the medical professionals involved. They exemplify the *Caring Imperative.*

The future of medical care requires a balance between what is possible and what is best for the individual. "Doing all we could do" needs to be replaced by doing what preserves and protects the quality of life. This will lead to patients and physicians being partners, to more discussions in families and to planning in advance to avoid decision making in the emotional time of crisis. Physicians and patients all need the ***Caring Imperative.*** ❖

Point...Counterpoint
An Ethical Walk Through the ICU

Philip J. Dougherty, MD, Menomonee Falls

THE SMS MEDICINE AND ETHICS Commission regularly reviews ethical vignettes which are presented here for your consideration.

Since the report of the SUPPORT study published in *JAMA* in November 1995, activities in the ICU have come under close scrutiny. The following scenarios are adaptations of real patients' situations that have been admitted to a unit nearby.

In the first bed is a 90-year old while male who has had advanced COPD for several years and for the past six months has been continuously oxygen dependent. He has developed a pneumonia and is now on a respirator for the fifth day. The family knows that he would rather not be on the respirator, but want him "kept alive" until a favorite grandson can be flown home from Germany where his on active duty with the US armed forces.

Question 1:
Should there be an age limit for admitting patients to an ICU? If so, what is the age? 65-75? 85?

Question 2:
Is the family's request to "baby-sit" and "prolong his life" for the stated reason a valid one?

In the next bed is a 68-year old male who is in his third post-operative day where a laparotomy has demonstrated a widely disseminated malignancy including metastasis to the liver. The operating surgeon is preparing to place a "G-tube" to feed the patient. There is an advance directive where the patient has elected to not be "kept alive by artificial means" if he has a terminal disease. The surgeon states, "I just operated on him! I can't just let him die."

Question 1:
Does the advance directive as stated, permit the placement of the feeding tube?

Question 2:
Is the surgeon's rationale acceptable and ethical?

Question 3:
With the knowledge that the patient has an advanced malignancy with a negative prognosis, should the patient have been admitted to the ICU at all?

In the third bed is a 42-year old female drug addict who is in the midst of a terminal meningitis and who has been HIV positive for eight years. She has had several previous hospital admissions for pneumonias and associated problems and has shown signs suggestive of dementia over the past six months.

Question 1:
Should we allow patients with terminal illnesses to be admitted to ICU?

Question 2:
Should we allow demented patients to be admitted to ICU?

Question 3:
Should we exclude ICU care to the patient with AIDS? ❖

Tell us what you think

The *WMJ* wants to know what recomendations you would make. Please send us a brief note with your thoughts and recomendations to: State Medical Society of Wisconsin, Judith Burke, Managing Editor, P.O. Box 1109, Madison, WI 53701, or e-mail your comments to us at: **JudithB@SMSWI.ORG.** You can also send us comments via the "talkback" button on our Website **(www.wismed.com)**.

We'll publish a summary of your comments and the discussion from the Ethics Commission in the next issue of the *WMJ*.

When Healing is not Possible

Judith D. Burke, managing editor

DEALING WITH the terminally ill. Most, if not all, physicians will have to minister to a terminal patient during the course of their careers. So it is interesting that while this topic is played out in public arenas (compliments of Kevorkian) and in the private lives of so many patients and their families, physicians still may find themselves lacking the proper tools or expertise to comfortably handle a terminal patient and the ensuing death.

When speaking to physicians about the controversial topic of physician assisted suicide, several of your colleagues feel that it should be a private matter between the physician and the patient. They wish that it could be removed from the spotlight and public debate. For these physicians, aid in dying is not a question of ethics about the preservation of life. For them, it's a question about the quality of life and the quality of death and how to find a way to unite the two. Please be sure to see your SMS President's thoughts on this debate on **page 5** and the Guest Editorial from Senator Fred Risser on **page 6**. We address the topic of legislating this complicated issue in a feature story beginning on **page 14**.

The *WMJ* spoke to many physicians and health care workers in preparing to address the topic of dealing with the terminally ill. We wanted to know how physicians prepare themselves to deal with terminal patients; how you prepare the patients and the families; and how you abide by the patient's wishes (especially when those wishes may be counter to what you, the physician, consider ethical and the state considers legal). We found that those physicians who are expert at handling a terminal patient, mostly oncologists, have developed ways to confront these issues in their own practices. We present their insights beginning with the Guest Editorials on **page 8**.

Your colleagues who deal with terminal patients with grace and verve have also faced the question of how to treat a person's pain humanly and compassionately. They believe the goal of pain management should be to allow the terminal patient to remain lucid and experience fulfillment at the close of his or her life without suffering. A look at the complex issue of pain management begins on **page 20**.

WMJ uncovered a great sensitivity among physicians who deal with the terminally ill on a regular basis. They share their hopes and apprehensions with us and perhaps you will find their stories heartening and useful in your own day-to-day practice as well as in your encounters with the terminally ill and their families. We are also happy to present an updated version of Advance Directives for Patients (**see page 51**), originally printed in the SMS publication, *A Physician's Guide to Wisconsin Health Law, Vol. II*, which offers insight for physicians trying to educate patients about advance directives. ❖

How Long is "Terminal"?

Carl Junkerman, MD, Milwaukee, SMS Medicine and Ethics Commission

Wisconsin physicians have a problem. Wisconsin's Living Will (LW) requires two physicians to certify that the patient has a "terminal condition" in order for the document to be activated. "Terminal condition" is further defined in the small print as an incurable condition that "...reasonable medical judgement finds would cause death imminently...." One indefinite term is used in an attempt to define another. Shortly after the latest version of the LW was circulated, I asked one of our state legislators what terminal meant. He said, "several weeks to perhaps a few months but not more than a year." No help there.

During the recent hearings about assisted suicide, US Supreme Court Justice Antonin Scalia, partly facetiously, resurrected the old saw that "Life is a terminal illness." No help there.

The referendum on assisted suicide that was passed in Oregon last year defined "terminal condition" as one that in reasonable medical judgement would cause death within six months.

Further, many hospice organizations, following Medicare payment regulations, require physicians to certify that the patient's death is likely to occur within six months. Obviously this becomes an educated guess, but at least there is a target.

Under the circumstances, it would seem wise for us to be thinking in terms of a six month duration when we certify our patients have a "terminal condition." ❖

There Ought to be a Law--*Or Should There?*

Jeremy Pittenger, contributing editor

EVEN BEFORE THE 1997-1998 Wisconsin legislative session began, the State Capitol doors were filled with talk of an old controversy: physician assisted suicide. Protests for and against the issue had started. Undoubtedly, this highly emotional issue will set the tone for more heated discussions during the next two years.

What was once handled as a private, almost behind-closed-doors understanding between a patient and their doctor has become a major public issue. Many physicians point to Dr Kevorkian's very public arguments and actions regarding the right to die issue as the main reason for this change. As a result, very few physicians are openly willing to offer such services in this era of media excitement and public scrutiny. But if the laws were different would this still be the case?

Last month, the US Supreme Court heard arguments in defense of two lower court decisions which based their findings on a constitutional right to physician assisted suicide. The Justices can do one of three things in deciding to grant a constitutional right to physician assisted suicide. They can recognize the constitutional right to die, they can recognize the constitutional right to life or they can remain silent and let the states battle it out for themselves.

A decision, if any, is expected this summer.

As the Wisconsin legislature convenes its 1997-1998 biennium the issue of physician assisted suicide has become a major topic for debate. Last month, State Senator Fred Risser (D-Madison) proposed a similar measure to the one he introduced two years ago **(see his Guest Editorial on page 6)**.

The proposal will allow certain individuals to make a written request for medication for the purpose of ending their lives. Last session, the bill received a public hearing in the Senate Committee on Judiciary, but was never brought before the floor of the state legislature. An Assembly companion bill authored by State Representatives Frank Boyle (D- Superior) and Tammy Baldwin (D-Madison) was referred to the Assembly Committee on Health, but never received a public hearing.

Senator Risser's bill will permit a Wisconsin resident who is at least 18 years of age, of sound mind, and not incapacitated, to voluntarily request medication from a physician to help end his or her life. In order to make the request, the patient must have a terminal disease which medical experts believe will cause death within six months.

No one can question the tremendous amount of contention surrounding this issue. It has all the symptoms of a classic controversy: high emotion, personal conviction, political implication and religious significance.

A private issue goes public

As with the general public, physicians seem to be split on the issue as well. Most doctors have witnessed the pain and suffering of the terminally ill. They can sympathize with a patient when the point is reached where the patient feels helpless, depressed and sometimes, suicidal. They have met with family members who are tired, distraught and angry with the system. However, there seems to be no fundamental consensus on how to honor a patient's wish to hasten the dying process. Nor does it seem that legislation would make the decision any easier for them.

Paul Dvorak, MD, of Dean Medical Center in Madison, a specialist in pediatric hematology/oncology stated, "This is hard to deal with in the legislature. It takes something that has long been private and now it is brought to the surface -- an extra burden to families. Aid in dying was done silently in the past, but since Kevorkian, everything has changed."

The "right" to die

Norman Desbiens, MD, an internal medicine specialist with the Marshfield Clinic, sees the issue as controversial because modern technology has changed much in the way we view the quality of life. "Our constitution discusses 'life, liberty and the pursuit of happiness.' It does not mention the right to die," said Desbiens. "However, our founding fathers could never have envisioned the present situation: being able to keep patients alive in states that they perceive to be worse than death."

Dr Desbiens believes the attitude of society plays a major role."I think it [physician assisted suicide] would be ethical today if the society at large would condone it.

"I would like to see medicine improve care of dying before ever legalizing a type of suicide though."

Tom McFarland, MD, a hematologist/oncologist practicing at Physicians Plus in Madison stated, "This is difficult because I do not feel like I have the right to tell patients that they do or do not have this right. We must look at these situations on a case-by-case basis. Most doctors will agree that they have an obligation to at least make the dying process more comfortable for the terminally ill patient, but not by over-prescribing medication."

Katherine Skaggs, MD, an obstetrician/gynecologist of Physicians

Plus in Madison feels that if physicians do a good job with necessary resources such as providing a comfortable environment and proper pain management, this would not be such a big issue. However, she also feels that patients should be able to decide with their families if they should want to die with the aid of their physician. Dr Skaggs believes that this is a difficult choice for anyone to make.

Bill Rock, MD, of the Dean Medical Center in Madison, sees it a little differently. "I do not believe physician assisted suicide is ethical. Life is just too precious. I see it as trying to get rid of the patient, rather than solving the problem. I think Senator Risser is wrong in that life is too sacred and he would be setting a dangerous precedent for the future."

Goal of healing

"I will not give no deadly medicine to any one if asked, nor suggest such counsel. . ."

Much has changed since the oath of Hippocrates was written.

What holds many physicians back from taking a professional stance on aid in dying legislation is their personal beliefs; many oppose physician-assisted suicide on religious or ethical grounds. But a doctor may believe in the 'right' to aid in dying, but would not personally participate in the act.

As Dr Dvorak emphasized, "It [aid in dying] does not conflict with the physician's goal of healing. It only conflicts whenever it is a moral issue for that physician."

Some physicians, such as Dr Skaggs, believe it is not unethical because of the amount of time and contemplation involved in the decision. "It is not a decision that is made lightly," said Skaggs. "Therefore we must be supportive of the patient's wishes."

However, she attaches many "ifs" to her willingness to help a patient a die. To her, it is a decision that can not be made with little involvement and no first-hand knowledge.

Tom McFarland, MD

Maureen Murphy-Greenwood, MD

"*If* all resources have been exhausted, *if* I had an intimate relationship with the patient, *if* I had a long history with the patient, *if* I knew the patient understood their decision, *if* hospice was involved, only then would I consider it. Obviously, we are talking about a lot of 'ifs' here."

> *". . . we must be supportive of the patient's wishes."*

Dealing with pain

Whether or not doctors agree with physician assisted suicide, the wish of a patient to be comfortable is honored by the vast majority. **(See related story on page 20.)**

According to Dr McFarland, "the universal thinking should be that a patient not suffer with pain. Dying with pain is undignified. If a patient should ask me how I deal with pain my answer to them would be that I believe in comfort and will do everything possible to make sure they receive the best palliative care. I always stress advocating for the patient. I want what they want."

By building such a relationship, Dr McFarland can better determine the needs of his individual patients. He sees the phrase "death with dignity" as varying from person to person. "One person's dignity is another person's suffering. That is why I tend to be liberal with pain medication, such as narcotics. Obviously, narcotics have a tendency to make a person sleepy and if that patient wants to be cognitive the whole time that may not work. Therefore, medication must be individualized. You have to make sure you know the patient and understand their wishes."

In addition to understanding the patient's wishes doctors may also consider what stage the patient is in as they consider administering pain medication. "The comfort options I offer a patient depend on how close to death the patient is," said Maureen Murphy-Greenwood, MD, a family practitioner with the Wisconsin Dells Deans Clinic Affiliate.

"For instance, if they have a matter of one or two weeks left I would most likely administer a Patient Controlled Anethesia

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(PCA). This would be administered in cases where the patient does not wish to feel any pain whatsoever. However, if the patient wants to still remain completely active I would work with different methods to keep them as comfortable as possible. My goal through this entire process is: What is the patient's goal? What do they want and desire? I try to tailor to their wishes as much as possible."

Dr Murphy-Greenwood has a special compassion for terminal patients. "I always try to attempt to control a patient's pain to the degree that the patient can live what they consider to be a meaningful life for as long as possible. The goal is to find that spot where pain control will let them do what they want to do with their life."

Dr Greenwood has never had a patient ask her to assist in the death process, however, she has had patients tell her that they were "ready to die." In such cases, she has stopped the antibiotics and continued morphine in order to keep the patient more comfortable.

Communication and comfort

A major argument against physician assisted suicide is that opponents feel many terminally ill patients are depressed, and not fully cognitive when making the decision to hasten the death process. Doctors understand this concern and stress the issue of open communication with the patient and their family as the death process occurs.

"The communication process I follow with terminally ill patients varies from patient to patient," said Dr McFarland. "I always tell my patients an oncologist has two callings. The first is if we can rid you of the cancer we will do it. The second is, if we cannot rid you of the cancer we must do everything possible to help you die with dignity."

As Dr McFarland further explains, one of the most important steps in dying with dignity is having the patient feel comfortable with their doctor. "I think one of the best things a doctor can do is to get to know the patient. We need to start breaking down the barriers. I have an open policy with my patients where they can ask me any question they want. I try to treat everyone the same. Because of this philosophy I try to build rapport with all my patients, which I believe builds trust, which makes the patient feel more comfortable."

"Physicians must talk about death issues and share opinions with their patients and their families. Preparing the patient and the family for what lies ahead can make a large difference in how the dying process in viewed."

Dr Dvorak spoke of the changing survival rates for cancer patients as one reason why people have difficulty facing death. "When I started treating children with cancer years ago no one lived. Now we cure about 75% of cancer patients."

Dr Desbiens also believes that preparing all parties involved for what lies ahead is key. "The communication must begin before the patient and family appreciate that the patient is dying," says Desbiens.

"Once the physician knows that, via age or disease, the patient has a short life expectancy, they should initiate a discussion with the patient and family about aggressiveness of care, use of CPR, ventilators, feeding tubes -- whatever is appropriate to the patient's condition.

"This is not being done. Internists and other doctors who take care of dying patients by and large ignore the reality of death that is surrounding them at all times. So, every day in my outpatient clinic I begin discussions with patients and their families about their preferences for care when they worsen. It must be part of life for doctors who care for the sick and elderly."

Dr Murphy-Greenwood also believes in doing everything possible in following a patient's wishes. "If the patient is no longer competent then the power of attorney is utilized and that person becomes the voice for the patient. If there is no power of attorney I try to work with whoever is closest to the patient, most likely the patient's kin. I will do my best to explain the patient's prognosis by detailing what can be gained or not saved by continuing aggressive measures."

Dealing with the families

Just as important as how the patient is treated is how the family receives messages from medical professionals. Dr Skaggs believes it is the physician's duty to be open and accessible at all times. "Helping families through this is a sort of a 'freebie,'" she says. "It feels good to be able to help people through this time. Hospice is very important too. I can't stress this enough. Family members need mental help as well as the physical, for example cleaning the patient and administering medication."

Dr Skaggs admits death can be very hard on her as well. "Recently, I had a 44-year old woman dying of ovarian cancer. She had two children, similar to my own childrens' ages. They did not want to see their mother in the hospital; they did not feel comfortable.

"Sadly, they rarely visited her. No one was there to stroke what little hair she had left on her head, to hold her hand, to talk with her. Fortunately, the mother was strong. . .probably stronger than I could ever be. However, this was still very difficult for me to watch."

What is the key to maintaining a trusting relationship with the patient and the family? "Honesty, honesty, honesty," according to Dr McFarland.

"A physician must learn to be approachable and treat everyone equally. For example, I prefer to be called 'Tom' as opposed to 'Doctor McFarland.' I think this makes the patient and the family feel more comfortable. I also encourage the patient and family to let me know if I have done anything to make them angry or if they are displeased in any way. This way I can also learn from my different experiences."

Dr McFarland tries to be straight-forward with patients right from the start. Most of the time this works, sometimes it backfires. "I had an 88 year-old terminally ill patient with cancer. I was very honest about his prognosis. He had about six more months to live.

"Unfortunately, his family did not appreciate my candor. They thought I was taking away his will to live and robbing him of any hope he might have had. He died a few months later and I believe the family thought I was part of the reason.

"That's hard to accept because I take great pride in my work and obviously do not want to be blamed for such things. However, I still try to say things as positive as possible, while being up front with the patient at the same time."

Lobby efforts

Controversial issues bring out very passionate advocates for and against the cause. Physician assisted suicide legislation is certainly no different. Against the proposal are well-known pro-life organizations such as Wisconsin Right to Life and Pro-Life Wisconsin. In addition, religious organizations and medical professional associations -- including the State Medical Society of Wisconsin and the AMA -- have come out against the proposal.

Those supporting such an initiative include individual freedom organizations such as the Hemlock Society.

The Hemlock Society describes itself as playing "an innovative role in advocating patients' rights in end-of-life decisions." During the last legislative session, Lori Pederson, state chair of the Hemlock Society lobbied in support of Senator Risser's bill. Pederson considers herself to be a strong believer in personal freedom and autonomy.

She points to the fear patients have of a system gone awry as a reason why she supports this initiative. "Look at all the people storing up their pills, obtaining medications illegally instead of seeking help from doctors," she said.

"These people have a tremendous fear of botching their own suicides by not taking the proper dosage, etc. when physicians could do it (assist in the suicide)."

The goal of the Hemlock Society, according to Pederson is similar to the goal physicians have for their terminally ill patients: to die comfortably. Pederson believes that in this day and age society avoids being direct about the death issue.

But what about the idea that physician assisted suicide is morally and ethically wrong? Retired United Methodist pastor, Reverend Brian McCarthy of Madison, an advocate for physician assisted suicide states that, "the tradition of condemnation of suicide in even the most extreme situation. . .I believe does not orginate from a coherent 'respect for sacredness of life' position.

"The proof of this is that it was accompanied by the widest tolerance for killing in war. You could never in any circumstance, kill yourself, but it was okay to kill as many other people as you could in war!"

On the other hand, there are those who fear the "slippery slope" such legislation could bring about. Michael J. Green, MD, MS and Norman Frost, MD, MPH, both of Madison, stated in a December 1995 *WMJ* article that the "right to die could become an obligation to die." They wrote:

"Patients at the end of life use health care resources disproportionately. In this era of cost containment and rationing, it is not difficult to imagine that a patient's *right* to request aid in dying could easily become an *obligation* to request such aid. Such social pressure for one to end his or her life, whether actual or perceived, would be unacceptable."

As we wait for the Supreme Court to make its decision, the controversy will no doubt continue. Dr Desbiens pointed out that it does not matter where physicians might stand on the issue, it is imperative they stay educated on the matter.

Doctors are sure to receive questions from patients and they must be prepared to address their concerns. The more a physician can share with their patient the more comfortable the patient will feel. As Dr Rock stated, "The credibility of a doctor is the most important thing a patient can receive."❖

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Using Opioids to Control Suffering: A Painstaking Approach

Marc Kennedy, Special to *WMJ*

It was hard to know just how much pain Ed Schultz was actually experiencing. He had a broken hip, many minor fractures and a perforated ulcer; his legs were twisted, his hands constricted. But because he also lived with Alzheimer's Disease, he could not always accurately relate his level of suffering.

"My dad always seemed to be in some pain," says Dierdre Luzwick, after her father passed away.

"It was one thing, then another. He was in the hospital for a month after his hip operation, then had an accident and had to have another hip operation. He had to have a belly tube put in.

"But Dr Gay would come to the house and check on Dad, and make sure he was in as little pain as possible. When morphine made my dad sick, Dr Gay changed the medication. He was very supportive, and had such a good attitude about helping my dad."

George Gay, MD, of Cambridge, did his best to relieve the pain, relying heavily on observations and impressions of Luzwick, who cared for her father.

"She's the one who deserves credit," says Gay of Luzwick's attentiveness. "In this kind of situation, it was important to get her perspective on the level of pain relief that Mr. Schultz required."

In prescribing opioids for non-malignant pain control, Gay was doing something many physicians today are not. Did Gay have any reservations?

"None," he replies. "You evaluate the situation, then prescribe what is necessary to ease his pain while not detracting from the quality of life. You use the means necessary to treat the patient appropriately."

Gay points out that alleviating pain means more than dispensing medication. For example, he had an occupational therapist fit Ed Schultz with hand splints to mitigate painful spastic contractions sometimes associated with Alzheimer's.

"You learn to do the right thing by getting to know your patient, and the care giver who knows the patient best. In this case it was his daughter," he adds. "Especially if the patient is not expected to survive, they need palliative care, including pain relief."

"You learn to do the right thing by getting to know your patient, and the care giver. . ."

Dangers of abuse, addiction or diversion are overblown, he says and adds that physicians can avoid problems by knowing their patient and understanding the nature of their pain. When asked if he would prescribe opioids for non-terminal patients, he says he already does. Two types of patients come to mind for Gay.

"Quadriplegics and surviving HIV patients. Both can suffer chronic pain, which can be controlled, sometimes with opioids, thereby allowing them to lead productive lives."

Knowing patients, their families and having a cooperative relationship with pharmacists and other involved health care practitioners are all important ingredients when treating pain with opioid use to mitigate the chance of diversion or abuse.

The R_x for pain

Dr Gay is one of a growing number of physicians who prescribe opioid analgesics for non-malignant chronic pain sufferers in addition to cancer patients. But according to pain management specialists, Gay and like-minded doctors are still too few, allowing too many patients to continue to suffer needlessly without opioids when appropriate or in insufficient doses.

June Dahl, PhD, University of Wisconsin Medical School Professor of Pharmacology and Director of the Wisconsin Cancer Pain Initiative states that, "Even the vast majority of physicians caring for such patients report that patients often do not receive the necessary pain control. And this is for cancer pain."

In the last ten years, in association with the Cancer Pain Initiative, Dahl and colleagues have developed standards for controlling pain related to malignancies and surgery. Some feared that adding use of narcotics to the formula for treating non-cancer pain would open a Pandora's Box of addiction, dispersion and abuse.

"These fears are proven to be unfounded based on what we've learned about cancer pain," Dahl explains. "But the struggle against misconceptions continues."

C. Stratton Hill, Jr., Professor of Medicine at the University of Texas Medical School, is an attending physician in the Section of Pain and Symptom Management of the MD Anderson Cancer Center in Hous-

Marc Kennedy is a freelance writer living in Madison.

ton. In an editorial in the December 1996 *Journal of the Florida Medical Association*, Dr. Hill urges pain management experts and state medical boards to cooperate to create medical standards for treating pain adequately which will help educate health care professionals and the public concerning appropriate use of opioids for pain and remove the stigma associated with their prescription and use.

Education key to pain control

"There are problems with the whole issue of pain management at both ends of the spectrum," says Michael Miller, MD, chair of the SMS Commission on Addictive Diseases.

"Some patients don't get adequately treated for pain because of an information deficit of some physicians regarding optimum pain management. This is due to either fear of addiction by patients or fear of sanctions by medical authorities for prescribing opioids. At the other end we have a lack of adequate screening for addiction regarding controlled substances."

"The other issue is that some are afraid of censure from medical boards for dispensing opioid analgesics," he adds.

"Many still are also afraid of addiction, though this is unfounded in the vast majority of cases. And those who report physicians to medical boards, often concerned family members and pharmacists, need to understand the nature of the latest advances in treating pain" to help counter fears based on outdated or erroneous information, says Miller.

"About one in 25 people have the potential for opiate addiction," says Miller. "And, for every five patients who walk in a doctor's door, one has a current or past diagnosis of substance abuse or dependence. They are at risk. Health care professionals should be trained to identify these signs.

"On the positive note, about 75% don't fall into either category, so for them doctors should not feel hampered in checking their pain with opioids if necessary."

Michael Miller, MD

June Dahl, PhD

While medical science and procedures concerning pain management have changed in the last 15 years, according to Miller, the attitudes of many physicians have not.

"Many were taught during medical training that tolerance and withdrawal were the same," adds Miller. "Now, they are not considered synonymous," as outlined in the latest edition of Diagnostic and Statistical Manual of Mental Disorders (DSM IV).

Misinformation damages patient relationship

Misconceptions concerning the nature of tolerance and withdrawal at best can make a patient in pain feel even more uncomfortable. At worse, it can undermine the relationship between patient and practitioner, supplanting trust with suspicion, and hope with fear.

Misunderstandings and the potential for diminishing quality of care underline the importance of keeping professionals up to date with the latest pharmacological and clinical information concerning pain control, as well as provide them with procedural standards on which they can rely.

"Developing guidelines is important because it gives health care practitioners a map to follow, and enables them to identify problems if they arise and when it's appropriate to raise a red flag," says Dahl.

"Guidelines also help people understand that there is a process involved in treating pain, based on individual need and circumstance. It is not just a matter of throwing drugs at someone.

"We need to look at the outcome desired for patients. We have to have a goal in mind," she continues. "Most patients at first are reticent to take opioids. They need to understand what the options are. We need to establish multidisciplinary pain teams, including psychiatrists, to consult with physicians and patients. We need to have experts available to consult. It's difficult for a single physician without extensive training to know what to do."

With terminal patients, the addiction misconception is a more difficult argument; that is, if someone is on the verge of death,

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addiction becomes moot. There is no reason for people to remain in agony when there are methods, including legally-available opioids, to control pain. This allows the terminally ill the opportunity to spend time during their last days with loved ones in a condition conducive to such visits. Patients can enjoy seeing family and friends without the constant distraction of pain, and the visitors can feel more comfortable.

"Death is still a mystery, but it need not be a misery for the afflicted, nor for those who love them."

Health care providers need to learn to find the right combination of methods that leaves the patient lucid, while still controlling pain.

For example, in the case of Ed Schultz, Dr Gay employed a variety of methods, and found the right combination of mechanisms and analgesics to treat his different types of pain.

"This involves relying on the input of the primary care giver, attentiveness to the patient's condition, and to a degree, some trial and error effort," says Gay.

But according to Dahl and other medical experts, this type of education is woefully lacking:

"Unfortunately, few health care providers are taught the basics of palliative care. Only a handful of medical schools require a course on the care of the dying. I could find only nine lines on terminal care in Harrison's *Textbook of Internal Medicine*, even though the mortality rate for human beings is 100 percent . .

"Death is still a mystery, but it need not be a misery for the afflicted, nor for those who love them."

Dahl argues that health care professionals better trained in pain control will result in a more informed public, which will likely decrease the demand for physician assisted suicide. Too often, she says, pain is seen as inevitable, and essentially untreatable; and as it increases, people then regard physician assisted suicide or euthanasia as their only options.

"Guidelines also should outline the need for considering the timing of delivering analgesics as well," says Dahl. In some instances, prescribing opioids "round the clock" more effectively controls chronic pain and requires smaller doses than providing the medication "as needed."

Pain increases with age

With thousands of people suffering needlessly today, the need to train and inform practitioners is obvious to pain control advocates. They point out that this demand will continue to increase as demographics change in the US — the most rapidly growing constituent is 75 and older. This age range is most likely to develop painful medical conditions.

"If I am to err, I will err on the side of relieving a patient's suffering."

Developing comprehensive guidelines and training programs will help practitioners better treat patients in pain, dispel misconceptions about tolerance and dependence, and help them recognize the relatively few patients who are at risk of abusing analgesics.

The educational process will take time, as many practitioners will find making a paradigm shift concerning opioid use an uneasy prospect at best.

"There are challenging situations that require special treatment."

Creating a contract with pain patients, as Dr Gay indicated he often does, can assist physicians in evaluating and tracking opioid use and need of patients.

"If I am to err, I will err on the side of relieving a patient's suffering," Gay says. "I will be right about 99% of the time. The other one percent, if someone pulls a fast one, well, in reality, the only thing that's likely going to be hurt is my ego."❖

Miller believes health care professionals should be trained to identify signs of risk, which can be accomplished in several ways:

1. Establish a dialogue with physicians through medical specialty societies, SMS commissions and regulatory bodies such as the Medical Examining Board, to prevent misguided or unwarranted sanctions. Ultimately, Miller, Dahl and William J. Hisgen, MD, Chair, SMS Medicine and Ethics Commission, would like to see guidelines for pain management established together with the MEB, as other states have done.
2. Provide training for doctors and other health care professionals for screening for addiction, and to identify those patients most likely to fit a profile for abuse or addiction.
3. Provide training for nurses and pharmacists concerning opioid use, as well as involve family members and other caretakers in decisions about the nature of using opioids to control pain.
4. Inform physicians that it is highly unlikely that prescribing opioids will create an addiction problem where none existed before.

Death with Dignity

Judith D. Burke, managing editor

DEATH WITH DIGNITY. Is it possible to achieve such a state? According to renowned physician and writer on the topic of death, Sherwin Nuland, MD, and professor of medicine at Yale, the answer is "maybe."

Dr Nuland spoke to a group of 300 Wisconsin health care professionals last Fall at a HospiceCare, Inc. sponsored seminar on the sobering subject of How We Die (also the title of his best-selling layman's book on the topic). Dr Nuland decided to look at the dying process because he felt that too many patients and families were afflicted by the romanticized notion of death portrayed by Hollywood and created by technology.

"Technology," said Nuland, "has created expectations too great for both physicians and patients."

For Dr Nuland, the struggle often comes down to differing goals: the patient and family want to be assured that the patient's last days are not spent in agonizing pain and that comfort is as high as possible. The physician wants to keep the patient alive for as long as possible. Dr Nuland believes that these differing goals have to align in order for the patient to achieve any sort of dignified death.

"I myself have pushed treatments onto dying patients when I knew the outcomes would not outweigh the damaging effects of the treatment itself," said Nuland.

"Patients have been conditioned over the years to expect treatment, even futile treatment." These treatments that provide hope for the physician and may ultimately result in medical advancements, do, in many instances, said Nuland cause more harm than good to the dying patient.

So for Nuland, the hope cannot be that the physicians will miraculously cure the dying patient, but that the dying patient will understand and have a chance to make sense of his or her death. The hope has to be that they won't die alone or emotionally abandoned. Then, death with humanity, with compassion, if not dignity, can occur.

Dr Nuland's message to the large audience of physicians, nurses, clergy, hospice and home care workers, and the media was simple: a sweeping change must take place throughout the medical profession that will alter the way physicians approach death and the dying process.

Norman Desbiens, MD, Marshfield, who was part of a panel discussion at the How We Die seminar, agrees. He believes that often, the best the physician can do is to eliminate the dying patient's pain; to make them as comfortable as possible, and to work with the family to make sure the patient's wishes are fulfilled.

Teaching hospice care

Dr Desbiens would like to see some sort of in-hospital hospice care to ease the transition from crisis stage to death both for the families and for young physicians.

"Too often, young doctors never see hospice or have the opportunity to interact with that environment."

William Rock, MD, with Dean Medical Center agrees that resident physicians don't see enough death and that they simply "...aren't trained to deal with failure and the fact that they can't always do something to cure it...."

"Education about death and dying needs to be covered in a more structured manner for young doctors," Desbiens says. He has real concerns about how to infuse new doctors with a sense of compassion *and* the confidence that it's okay to limit aggressive treatment that may just be expensive and shorten or lessen the quality of the time the patient actually has left.

Not just the patient

Over and over, when speaking with physicians who deal with terminally ill patients, the recurring message was: you aren't just treating the patient, you are treating the patient's family, as well.

Both Desbiens and Rock agree that discussions with the patient and the family about the patient's treatment wishes must be started prior to an in-patient situation. But they both feel that more emphasis needs to be placed on how that information is communicated to all the care givers. The problem arises over and over again: physicians simply don't know their patients' wishes. Dr Desbiens believes this to be true even among primary care physicians.

Discontinuity of care is an issue, especially in the ICU, where physicians rotate frequently. As Dr Nuland pointed out, "Spiritual, ethical, ethnic, and personal values are paramount over clinical values at the time of death, but are largely overlooked because physicians don't know the patients."

The American Academy of Family Physicians has addressed this concern in light of managed care limitations. The goal is that the family physician, while helping to control costs and operating within management plans, remain above all the patient's advocate and help assure that the patient's advance directives and goals for medical care are observed by everyone in the system.

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Hospice care

The term "hospice" can be traced back to early Western Civilization when it was used to describe a place of shelter and rest for weary or sick travelers on long journeys. The term was first applied to specialized care for dying patients in 1967, at St. Christopher's Hospice in a residential suburb of London.

Today, the term "hospice" refers to a steadily growing concept of humane and compassionate care which can be implemented in a variety of settings -- in patients' homes, in hospitals or in freestanding inpatient facilities. Through expert pain and symptom management, hospice seeks to help patients live each day to the fullest, enabling them to spend their last days with dignity and quality at home or in a home-like setting.

There are now over 2,000 hospices around the country, many of them associated with integrated health systems, that make up the National Hospice Organization.

In Wisconsin, hospice care is available throughout the state under the umbrella of Wisconsin Hospice Organization for patients with a life expectancy of six months or less. The services are provided by an interdisciplinary team of registered nurses, social workers, licensed practical nurses, certified nursing assistants, chaplains, bereavement counselors, and volunteers. The interdisciplinary team approach focuses on palliative care in the context of the patient's values.

Susan Corrado, RN, On-Call Team Leader for HospiceCare Inc.'s Madison office, discussed the team approach to care. "Once a physician makes a referral, the social worker and nurse perform an admission visit where we visit the patient, assess the needs and describe the hospice services and limitations."

Following admission to the program, the RN then works closely with the referring physician. The RN case manager is responsible for the patient's overall plan of care. In determining the care plan, the RN works closely with the physician, usually an oncologist.

"We really try to keep the lines of communication open with the physician, and are in contact every two to three weeks," said Corrado. Most physicians are receptive to hospice intervention.

"We serve as the eyes and ears of the physician in the home, since most doctors no longer make house calls, and many patients lack the energy to visit the doctor's office on a regular basis."

The physicians find it helpful that the RNs are available in the middle of the night and that hospice provides bereavement counseling for the families. But Corrado notes that outside of the core group of physicians who work with hospice, she has encountered some resistance.

"It's the duty of hospice to stay on top of how to help patients live out their remaining days comfortably and without pain. . ."

"Some physicians may struggle with hospice involvement because they are uncomfortable that we're taking over the case management or sometimes they're reluctant to refer the patient because it can seem like an admission of failure." James Pollock, MD, a gastroenterologist with the Monroe Clinic, agrees. He became involved in hospice when the hospice director at his clinic, an oncologist and personal friend, was moving out of state and they needed a replacement. "It was a completely new experience for me," Pollock says.

"Hospice requires you to think in new terms, outside the models we're taught in med school. Where you normally have a model of physician giving care plans and orders to an RN, with hospice you have an interdisciplinary approach of physician, RN, social workers, volunteers, etc.," says Pollock. Physicians need to understand what goes on behind the scenes with hospice; they need to understand a different approach to patient care. He, too, believes that there is a core group of physicians who deal with hospice on a regular basis and who are, consequently, more open to what it offers.

Norman Desbiens, MD

He has seen some resistance by physicians to "let go" of the case management. And too, he believes that it's sometimes difficult to offer hospice to a patient because either the physician or the patient is not ready to give up on the possibility of curative treatments. "Hospice is the 'end of the road.' And some doctors may not be able to give in to or overcome that sense of failure.

"But," Pollock says, "we [hospice physicians] wholeheartedly try to avoid that feeling."

An open mind

Pollock says that it's not a failure to help a dying person live comfortably and die with dignity. But

to do so, "you have to be able to get past that traditional mode of care and be open to new experiences. You have to think about creative uses of symptom control and sometimes it's difficult for mainstream physicians to stay on top of all the advancements going on in the realm of pain management.

"It's the duty of hospice to stay on top of how to help patients live out their remaining days comfortably and without pain, but it's the duty of physicians to stay open minded to new methodologies, including unconventional ones."

Pollock also believes that unconventional methods of addressing pain issues, such as unusual drug combinations or music therapy or massage, while they may be difficult for physicians to accept, may be justified and time well spent for the dying patient.

"We're not touchy-feely guys by nature. But touchy-feely may be what works best and we've got to get over our uncomfortableness and look at the whole picture and what can best alleviate our patient's suffering."

Communication and education from patient to physician to patient to family

And, overall, Pollock feels that physicians need more education about drugs and pain management. "Too many physicians are still concerned with addicting their patients or the possible side effects of pain meds. They need to get away from these fears."

Pollock has. And he believes his life has changed considerably because of his involvement with hospice. Traditionally, oncologists have had the largest representation among hospice physicians, but that's changing and Pollock is concerned about the ways primary care physicians treat death and dying.

"Primary care physicians need to be more adept at talking about death with the terminal patient. They need to be able to talk about how the patient *feels* about dying. I'm much better at that now than say, three or four years ago, and it's because of hospice.

"I'm much more likely to consider the patient's spirituality and what I can do to help them have a 'good' death: a concept difficult to define in cold medical terms, but any hospice care worker can tell you when it actually happens."

Pollock has attended meetings of the American Academy of Hospice and Palliative Medicine, an international organization of physicians dedicated to "the advancement of hospice and palliative medicine in the management of the terminally ill." He believes that helping patients near the end of their lives come to terms with issues such as their spirituality and previously unresolved family issues are things that provide a powerful alternative to the Kevorkians of the world.

"It's so far out of the mainstream for most physicians, but helping people experience personal growth at the ends of their lives is helping them to have a good death. And that, along with proper pain management, can negate any need for assisted suicide."

Wisconsin is fortunate to have a hospice program that is larger than those in some states that rely entirely on volunteers. The program is certified by Medicare and Medicaid and licensed by the State of Wisconsin and Corrado notes increasing referrals in the last five years.

"We see roughly 80 patients per day, which is up three times from 1991." For comparison, some states, like Florida, see 300 patients per day. The trend, thinks Corrado, is for increasing referrals because the care is covered by Medicare and most private insurance. And, hospice does not turn anyone away, so even those with no coverage are admitted to the program.

Corrado has worked with physicians in the area for a long time and stresses the importance of patient advocacy. "Communication between the physician and the patient is vitally important, before the crisis stage, and education is the key. Decisions require education about prognosis, treatment limitations, the impact and burden of treatment on the family, the expected quality of life, etc."

James Pollock, MD

"In order for hospice to be successful or for any kind of death to take place with dignity, education is crucial. And while it can come from hospitals, nursing homes, hospice, community centers, groups like the Hemlock Society and Right to Life, the responsibility lies with the individual to talk with his or her physician about the expectations and desires for their death."

The role of palliative care is changing as hospice becomes more mainstream. Indeed, Dr Desbiens' dream for a hospice in-hospital program may not be too far off in the future. The Pleasant View nursing home, a 156-bed facility in Monroe, now provides palliative care with a hospice model, by contracting with hospice to come into

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the nursing home. The program started about five years ago and has consistently grown to a total of 81 patients.

Charlotte Paulson, RN, Director of Resident Services, explains that their facility takes these patients when the families are no longer able to provide care. When the program was initiated, hospice came into the facility and provided training for Pleasant View staff. Now, they provide yearly in-service training and training for all new staff members. The program, while successful, has had to overcome some hurdles.

"At first there was real resistance among our nurses because the program requires that when any physical or mental change in the patient takes place that would require a physician to be contacted, the hospice nurse gets called first. The hospice nurse is responsible for making all the care decisions and contacting the physician.

"There was a struggle for a while; the staff had to get used to giving up some of the case management. But now it's more of a team effort as trust and faith has been established.

"Hospice has worked hard to educate physicians in our area. I have seen some resistance in older physicians, and sometimes even younger ones, to not provide narcotics for fear of addicting the patient.

"And, I've seen the struggle some physicians have in giving up aggressive, curative treatment and feel like they are 'settling' for palliative care."

But, Paulson feels the on-site hospice is a true benefit to dying patients and their families. She talks about the support they all receive from the entire hospice team and about the ways in which the bereavement counseling is utilized. "Our newest hospice patient is only 22 years old. His family will benefit greatly from the support hospice, unlike a single physician, will be able to provide throughout the dying process.

Other in-patient facilities are being discussed and may not be far behind in being able to offer palliative treatments that can provide terminal patients and their families with the proven benefits of compassion, humanity and even dignity in their final moments.

For more information about the Wisconsin Hospice Organization, contact Linda Grilley, President, The Hospice Program, (715) 847-2704; Jeanne Bruce, Executive Director, (414) 473-7847; or check your telephone directory for local hospice listings. You can visit the National Hospice Organization's world wide web site at: http://www.nho.org; the American Academy of Hospice and Palliative Medicine also has a web site at: http://www.aahpm.org.❖

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Chronic Disease Mortality Among Wisconsin Native American Indians, 1984-1993

Mathew J. Reeves, BVSc, PhD; Patrick L. Remington, MD, MPH; Ray Nashold, PhD; and James Pete

Abstract

Premature chronic disease mortality continues to be a problem among American Indian populations. To document the chronic disease burden in the Wisconsin American Indian population, age- and sex-specific incidence-density mortality rates for ten chronic diseases (ischemic heart disease, stroke, diabetes, chronic obstructive pulmonary disease, cirrhosis, and cancer of the breast, cervix, lung, colorectum and prostate) were estimated for a 10-year period (1984-1993) and compared with the Wisconsin non-Hispanic white population.

Compared with whites, American Indians had markedly higher mortality rates from diabetes and cirrhosis in all age- and sex-specific groups. Ischemic heart disease mortality was significantly greater in both American Indian men and women 45-64 years of age (Rate Ratio [RR] = 1.7 and 2.1, respectively) compared to whites of the same age, but was lower in American Indians 65 years of age or older (RR = 0.9 for both sexes). Overall, these ten chronic diseases were responsible for a significant excess number of deaths in middle-aged American Indian men and women (i.e., 45-64 years of age), whereas the chronic disease mortality experience of older American Indian men and women (i.e., $\geq$ 65 years of age) was similar to that of the older white population. Diabetes and cirrhosis were the most important causes of increased mortality overall; however, ischemic heart disease was responsible for a large number of excess deaths in middle-aged American Indian men and women.

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Introduction

The health and welfare of native American Indians and Alaskan Natives have received increasing attention recently.[1,2] Chronic diseases have been found to be an important cause of premature mortality in American Indian populations.[2] Despite limitations in the quality and validity of currently available data sources, notable differences have been identified in the mortality and morbidity from chronic diseases in American Indians, compared to the general population of the United States. The high incidence of cirrhosis, diabetes, and cervical cancer in American Indians is well recognized.[2-4] Overall cancer incidence and mortality for American Indian populations is less than that of the general US population, although this may be due, in part, to racial misclassification in cancer registries.[5] American Indians have been shown to have lower rates of cancer of the breast, uterus, ovary, prostate, lung, and colo-rectum, compared with the general population.[6,7] However, American Indians have higher rates of cancer of the cervix, stomach, kidney, and gallbladder.[7,8] Finally, American Indians have been shown to have a high prevalence of chronic disease risk factors such as obesity,[9,10] alcohol abuse,[11] and smoking.[10,12]

The objective of this study was to document the relative differences in the mortality rates of adult American Indians (aged 45 years and older) compared with the non-Hispanic white population of the same age in Wisconsin during a 10-year period for the following ten chronic diseases: ischemic heart disease (IHD), stroke, diabetes, chronic obstructive pulmonary disease (COPD), cirrhosis, and cancer of the breast, cervix, lung, colorectum and prostate.

Methods

Death records of all American Indians and non-Hispanic whites 45 years of age and older residing in Wisconsin between January 1984

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and December 1993 that had the following conditions listed as the underlying cause of death were obtained from the State vital records registry: ischemic heart disease (ICD-9 codes 410-414), stroke (ICD-9 codes 430-438) , diabetes (ICD-9 codes 250), chronic obstructive pulmonary disease (ICD-9 codes 490-496), cirrhosis (ICD-9 codes 571), and cancer of the breast (ICD-9 codes 174-174.9), cervix (ICD-9 codes 180-180.9), lung (ICD-9 codes 162-162.9), colorectum (153-154.1) and prostate (ICD-9 codes 185).

Age- and sex-specific incidence-density mortality rates were calculated using 1990 census population estimates of Wisconsin American Indians and non-Hispanic whites (see Tables 1 and 2). Because the total number of deaths for some diseases in the American Indian population was small (i.e., < 10), the age-specific rates were calculated for only two broad age categories (45-64 years and ≥ 65 years).

The rate ratio (RR), a measure of the magnitude of the association between race (i.e., American Indians versus non-Hispanic whites) and mortality was calculated for each condition by dividing the incidence-density mortality rate for American Indians by the incidence-density mortality rate of non-Hispanic whites. To document the precision of the RR, which was especially important given the small number of deaths in some categories, we calculated 95% confidence intervals (95% CI) using Epi-Info (Epi-Info Version 6, Epidemiology Program Office, Centers for Disease Control and Prevention, Atlanta, GA 30333.)

Finally, the expected number of deaths in the American Indian population that would have been expected, if American Indians had had the same mortality experience as the non-Hispanic whites, was calculated for each condition by applying the age- and sex-specific incidence-density mortality rates for non-Hispanic whites to the 1990 American Indian population estimates.

The total number of expected deaths for all ten chronic diseases in each age- and sex-specific group was compared with the observed number to obtain an overall summary of the chronic disease burden in Wisconsin American Indians. The Chi-square test of independence was used to determine whether the observed number of American Indian deaths was statistically significantly different (alpha 0.05) from the expected number.

Results

The age-specific mortality rates for American Indian and non-Hispanic white women 45-64 years of age and 65 years of age or older for nine chronic diseases are shown in Table 1. American Indian women 45-64 years of age had markedly higher mortality rates from IHD, diabetes, COPD, cirrhosis and cervical cancer compared to white women of the same age. American Indian women 45-64 years of age were nearly seven times more likely to die from diabetes (RR= 6.7), almost six times more likely to die from cirrhosis (RR= 5.8), and four times more likely to die from cervical cancer (RR= 3.9). However, both middle-aged and older (i.e., 65 years) American Indian women had notably lower breast cancer mortality rates (RR= 0.4 for both age groups), compared to similarly aged white women.

Overall, there were 115 observed deaths in female American Indians aged 45-64 years for these nine chronic diseases, which was 48 more than would have been expected if these middle-aged American Indian women had had the same mortality experience as non-Hispanic white women (expected number = 67). This excess number of deaths was statistically significantly (Chi square= 34.4, 1 degree of freedom [df], P < 0.001). Ischemic heart disease and diabetes were responsible for the largest number of excess deaths (19 for each disease), followed by cirrhosis (13 excess deaths).

Among women 65 years of age or older, American Indians had markedly higher mortality rates for diabetes (RR= 3.5) and cirrhosis (RR= 5.7) (Table 1). The high rates of diabetes and cirrhosis were responsible for 26 and nine excess deaths, respectively. However, the total number of observed and expected deaths was almost identical (253 versus 246) (Chi square = 0.2 (1 df), P = 0.65). Despite the higher mortality rates for diabetes and cirrhosis, the total number of observed deaths was not appreciably elevated because of lower mortality for IHD, stroke, breast cancer, and colorectal cancer among older American Indian women.

The age-specific mortality rates for American Indian and non-Hispanic white men 45-64 years of age and 65 years of age or older for eight chronic diseases are shown in Table 2. Mortality rates for diabetes (RR = 3.2) and cirrhosis (RR = 3.7) were again markedly higher in American Indian men 45-64 years of age, compared with white men of the same age. The mortality rate for IHD was 70% higher in middle-aged American Indian men compared to middle-aged white men (RR= 1.7) and IHD accounted for the greatest number of excess deaths among American Indian men in this age group (n = 40). Overall there were significantly more observed deaths in this age group of American Indian men (n = 175), compared to an expected number of 111 (64 excess deaths: Chi square= 36.9 (1 df), P < 0.001).

Mortality rates from diabetes and cirrhosis were also much higher in American Indian men 65 years of age and older, compared with non-Hispanic white men

Table 1. Age-specific incidence-density mortality rates* (MR) for American Indian (AI) and Non-Hispanic White (NHW) Women in Wisconsin, 1984-1993, for Nine Chronic Diseases

Disease	Observed no. deaths (AI)	MR* (AI)	MR* (NHW)	RR (95% CI)	Expected no. deaths (AI)	Observed - expected (AI)
	45-64 years of age (AI population= 2,618. NHW population= 437,814)[1]					
IHD	37	141.3	68.0	2.1 (1.5, 2.8)	18	19
Stroke	5	19.1	21.1	0.9 (0.4, 2.2)	6	-1
Diabetes	22	84.0	12.5	6.7 (4.4, 10.2)	3	19
COPD	8	30.6	14.4	2.1 (1.1, 4.2)	4	4
Cirrhosis	16	61.1	10.5	5.8 (3.6, 9.5)	3	13
Breast CA	6	22.9	54.6	0.4 (0.2, 0.9)	14	-8
Cervical CA	4	15.3	3.9	3.9 (1.4, 10.4)	1	3
Colorectal CA	2	7.6	18.9	0.4 (0.1, 1.6)	5	-3
Lung CA	15	57.3	49.1	1.2 (0.7, 1.9)	13	2
Total	115				67	48
	≥ 65 years of age (AI population= 1,121. NHW population= 375,608)[1]					
IHD	122	1088.3	1157.6	0.9 (0.8, 1.1)	130	-8
Stroke	40	356.8	436.3	0.8 (0.6, 1.1)	49	-9
Diabetes	37	330.1	95.8	3.5 (2.4, 4.5)	11	26
COPD	13	116.0	117.2	1.0 (0.6, 1.7)	13	0
Cirrhosis	11	98.1	17.2	5.7 (3.1, 10.1)	2	9
Breast CA	6	53.5	126.1	0.4 (0.2, 0.9)	14	-8
Cervical CA	2	17.8	7.3	2.4 (0.6, 9.6)	1	1
Colorectal CA	8	71.4	112.8	0.6 (0.3, 1.2)	13	-5
Lung CA	14	125.9	112.8	1.1 (0.6, 1.8)	13	1
Total	**253**				**246**	**7**

* Incidence-density mortality rate = number of deaths per 100,000 person-years
[1] Population estimates based on the 1990 Wisconsin census.
CA= Cancer; no. = number.

(Table 2). Older American Indian men were twice as likely to die from diabetes and nearly four times more likely to die from cirrhosis (RR = 3.7). The overall number of observed deaths in older American Indian men was not significantly different from the expected number based on the mortality rates of older non-Hispanic white males (252 observed versus 265 expected) (Chi square= 0.64 [1 df], P = 0.42). The main reason for the lower than expected overall number of deaths was the lower mortality rate of IHD in American Indian men compared to non-Hispanic white men, which was responsible for 19 fewer deaths than expected over the 10-year period.

Discussion

This study compared the chronic disease mortality experience of Wisconsin American Indians with the non-Hispanic white population over a 10-year period and found that the burden of chronic disease mortality differentially affects both middle-aged American Indian men and middle-aged American Indian women. Over the 10-year period, these chronic diseases were responsible for 48 excess deaths in 45-64 year old American Indian women and 64 excess deaths in 45-64 year-old American Indian men. In contrast, overall chronic disease mortality was not increased in the older American Indian population (i.e., 65 years of age or older). There are several possible explanations for these findings.

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First, the prevalence of chronic disease risk factors, such as smoking and obesity, may be higher in the 45-64 year-old American Indian population, compared with older American Indians.

Second, it is possible that the higher observed mortality in the middle-aged American Indian population may represent a cohort effect with this group of individuals adopting poorer health behaviors at a younger age.

Finally, the similar overall mortality in the older American Indian population compared with the older white population may represent a survivor effect: the excess premature mortality of the American Indian population results in a healthier-than-expected older American Indian population. Unfortunately, data are not currently available to test each of these hypotheses; further research is required to determine the underlying causes of the higher chronic disease burden in middle-aged American Indians.

The results of this study once again confirm the importance of diabetes and cirrhosis as important causes of mortality in American Indians.[2] The mortality rates from diabetes and cirrhosis were markedly elevated in both sexes and in both age groups. These two diseases were major contributors to the excess number of deaths in each age- and sex-specific group. It is important to point out that the number of deaths due to diabetes reported in this study is probably a considerable underestimate of the total contribution of diabetes to chronic disease mortality since diabetes-related mortality is based on the underlying cause of death only. Even when all-cause mortality is used, mortality statistics clearly understate the impact of diabetes, since most people die of the complications of diabetes rather than of the disease itself.[13] A major risk factor for diabetes is obesity, which has been shown to be significantly higher in American Indian populations, compared with the general US population.[10,14]

The high mortality rates of cirrhosis are probably related to excess alcohol consumption, although previous viral infections Hepatitis B and C) may also play a significant role.[15] Alcohol intake among American Indians varies considerably by tribe, and although data on tribal-specific alcohol consumption in Wisconsin American Indians are sparse, alcohol consumption is probably high based on the results of this study. Data reported by Peterson et al. (1994), who evaluated behavioral risk factors of Chippewa Indians living on Wisconsin reservations, found that the frequency of alcohol use was similar to that of the general Wisconsin population. However, this Indian population reported much greater alcohol consumption on the occasion when they drank, as compared with the general Wisconsin population.[10]

Ischemic heart disease mortality was higher in both American Indian men and American Indian women 45-64 years of age but was lower in both older American Indian men and women, compared to non-Hispanic whites. Death from IHD was a major contributor to the excess mortality in middle-aged American Indians, particularly among males where over half the excess deaths were from IHD. The lower mortality rates for older American Indian men and women contributed to 19 fewer observed deaths in men and 8 fewer deaths in women than expected over the 10-year period. Previous work has also documented that in Wisconsin, IHD mortality rates in American Indians are higher in adults 45-64 years of age but lower in the older persons.[1] Nationally, the mortality rate from IHD in American Indians has generally been reported to be lower than that of the US population, although significant variation between tribes and regions exists.[16] Regional data from the Indian Health Service (IHS) show that American Indians in the Bemidji IHS area (Wisconsin, Michigan, and Minnesota) have one of the highest rates of heart disease of all IHS areas.[17] The high heart disease rates of northern plains Indians has also been documented in a study that evaluated IHD mortality rates in Sioux Indians.[18] Thus, in middle-aged American Indians, the high IHD mortality rates found in this study appear to be consistent with the scant information already published on IHD mortality rates in northern plains Indian tribes. The increasing IHD mortality rates in middle-aged American Indians has been ascribed to the increasingly high prevalence of poor health behaviors and lifestyle factors, such as smoking, obesity, physical inactivity, and poor diet.[16]

The higher rates of cervical cancer in American Indian women in Wisconsin is typical of that found in other native American populations in North America[3,7] and is thought to be primarily related to lower use of Pap screening services, although it could also indicate a higher overall cervical cancer incidence rate. Despite the higher mortality rates in American Indians, cervical cancer only accounted for four excess deaths over the 10-year period because mortality rates for cervical cancer are very much lower compared to other chronic diseases. Breast cancer mortality rates in Wisconsin American Indians were less than half those of non-Hispanic whites. The lower-than-expected rate of breast cancer mortality in this population is similar to the findings of a recent report that used IHS data.[7] The cause of such a large difference in breast cancer mortality is not known, although racial misclassification of Americans Indians on death certificates could be

Table 2. Age-specific incidence-density mortality rates* (MR) for American Indian (AI) and Non-Hispanic White (NHW) Men in Wisconsin, 1984-1993, for Eight Chronic Diseases

Disease	Observed no. deaths (AI)	MR* (AI)	MR* (NHW)	RR (95% CI)	Expected no. deaths (AI)	Observed - expected (AI)
	45-64 years of age (AI population= 2,444. NHW population= 413,068)[1]					
IHD	96	392.8	230.6	1.7 (1.4, 2.0)	56	40
Stroke	10	40.9	27.4	1.5 (0.8, 2.7)	7	3
Diabetes	12	49.1	15.6	3.2 (1.7, 5.5)	4	8
COPD	8	32.7	23.3	1.4 (0.7, 2.8)	6	2
Cirrhosis	20	81.8	22.1	3.7 (2.3, 5.6)	5	15
Colorectal CA	6	24.6	28.0	0.9 (0.4, 1.9)	7	-1
Lung CA	21	85.9	93.8	0.9 (0.6, 1.4)	23	-2
Prostate CA	2	8.2	11.5	0.7 (0.2, 2.8)	3	-1
Total	175				111	64
	≥ 65 years of age (AI population= 842. NHW population= 257,274)[1]					
IHD	118	1401.4	1630.4	0.9 (0.7, 1.0)	137	-19
Stroke	39	463.2	396.9	1.2 (0.8, 1.6)	33	6
Diabetes	16	190.0	95.3	2.0 (1.2, 3.2)	8	8
COPD	20	237.5	286.4	0.8 (0.8, 1.6)	24	-4
Cirrhosis	11	130.6	35.3	3.7 (2.0, 6.5)	3	8
Colorectal CA	12	142.5	157.8	0.9 (0.5, 1.6)	13	-1
Lung CA	25	296.9	343.6	0.9 (0.6, 1.3)	29	-4
Prostate CA	11	130.6	211.1	0.6 (0.3, 1.1)	18	-7
Total	**252**				**265**	**-13**

* Incidence-density mortality rate = number of deaths per 100,000 person-years
[1] Population estimates based on the 1990 Wisconsin census
CA= Cancer; no. = number.

a major contributor to this difference.

This study has some potentially important limitations. First, as with most investigations of American Indians, the underlying population is comparatively small and the modest number of events (deaths) tends to make the mortality rate estimates imprecise. As an example of the small size of this population, there were only 1,121 American Indian women and 842 American Indian men over 65 years of age in the 1990 Wisconsin census (Tables 1 and 2). Over the 10-year period, there were only a few deaths for some diseases such as cervical cancer (n = 6) or colorectal cancer (n = 28) in the American Indian population. These small numbers made it necessary to use only two broad age strata to obtain reasonably stable age-specific rate estimates.

Second, these results are undoubtedly still affected by residual confounding by age, since within each of the two age strata used the American Indian population is younger than the non-Hispanic white population (for example, in the 45-64 age group, 64% of Native American men were 54 years of age or younger compared to 54% of non-Hispanic white men). The younger age of the American Indian population within each age strata would tend to underestimate the true mortality rates. Future studies should aim to obtain more data (perhaps by including data from other northern plains states) that would allow one to examine mortality rates within smaller age categories, as well as to use multivariable modeling techniques that adjust for age differences between populations. [19]

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A third limitation is that the mortality rates for American Indians in this study are probably further underestimated because of racial misclassification that has been documented in this and other vital records systems.[5,20] A substantial proportion of American Indians are classified as whites on death certificates, which obviously tends to underestimate the true mortality rates.

In summary, the effect of these last two limitations is to underestimate the mortality rates in American Indians and is therefore probably most important when interpreting the findings of lower cancer mortality and lower IHD mortality of the older American Indian population. Finally, the study underestimates the real burden of chronic diseases since it did not analyze morbidity data such as hospitalization and outpatient health care costs.

In conclusion, this study clearly demonstrates the impact of chronic disease mortality on the American Indian population in Wisconsin. Overall, diabetes and cirrhosis were the most important causes of increased mortality among American Indians of all ages; however, ischemic heart disease was responsible for a large number of premature deaths in middle-aged American Indian men and women.

This study illustrates the need for further research, especially with respect to understanding the causes of the higher premature chronic disease mortality rates in middle-aged American Indians. The information summarized in this paper can be used to set specific time-measured objectives for American Indians in Wisconsin, similar to the objectives set in the Public Health Agenda. The Great Lakes Intertribal Council, in collaboration with the Wisconsin Division of Health, University of Wisconsin, is developing a program to identify specific preventable causes of premature death by reviewing medical records in two tribal health clinics. This information will be helpful to identify specific programs and policies needed to prevent premature chronic disease deaths among Wisconsin American Indians.

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References

1. Center of Health Statistics: Minority Health in Wisconsin: Towards a Healthy Diversity. 1993. Wisconsin Department of Health and Social Services.
2. Paulozzi LJ, Mendlein JM. Chronic disease in minority populations: American Indians and Alaska Natives. *Chronic disease in minority populations*. Centers for Disease and Control and Prevention, Atlanta, GA, 1994.
3. Band, P.R., Gallagher, R.P., Threlfall, W.J., Hislop, T.G., et al. Rate of death from cervical cancer among native Indian women in British Columbia. *Can Med Assoc J* 147:1802, 1992.
4. Rith-Najarian, S.J., Valway, S.E., Gohdes, D.M. Diabetes in a Northern Minnesota Chippewa tribe. *Diabetes Care* 16:266, 1993.
5. Frost, F., Taylor, V., Fries, E. Racial misclassification of native Americans in a Surveillance, Epidemiology and End Results Cancer Registry, *J Natl Cancer Inst* 84:957, 1992.
6. Bleed, D.M., Risser, D.R., Sperry, S., Hellhake, D., Helgerson, S.D. Cancer incidence and survival among American Indians registered for Indian Health Service Care in Montana, 1982-1987. *J Natl Cancer Inst* 84:1500-1505, 1992.
7. Nutting, P.A., Freeman, W.L., Risser, D.R., Helgerson, S.D., et al. Cancer incidence among American Indians and Alaska Natives, 1980 through 1987. *Am J Public Health* 83:1589, 1993.
8. Wiggins, C.L., Becker, T.M., Key, C.R., Samet, J.M. Cancer mortality among New Mexico's Hispanics, American Indians and Non-Hispanic Whites, 1958-1987. *J Natl Cancer Inst* 85:1670-1678, 1993.
9. Broussard, B.A., Johnson, A., Himes, J.H., Story, M., et al. Prevalence of obesity in American Indians and Alaskan Natives. *J Clin Nutr* 53:1535, 1991.
10. Peterson, D.E., Remington, P.L., Kuykendall, M.A., Kanarek, M.S., et al. Behavioral risk factors of Chippewa Indians living on Wisconsin reservations. Public Health Reports 109:820-823, 1994.
11. Indian Health Service: Alcohol-related discharges from Indian Health Service and contract general hospitals: fiscal year 1984. DHHS report no. 286K (0159K). Indian Health Service, Rockville, MD, 1985.
12. Centers for Disease and Control and Prevention. Cigarette smoking among American Indians and Alaskan Natives - Behavioral Risk Factor Surveillance System, 1987-1991. *MMWR* 41:861-862, 1992.
13. Bishop, D.B., Roesler, J.S., Zimmerman, B.R., Ballard, D.J. Diabetes. *Chronic Disease Epidemiology and Control*, eds: Brownson, Remington and Davis, American Public Health Association, Washington DC, 1993.
14. Welty, T.K. Health implications of obesity in American Indians and Alaskan Natives. *Am J Clin Nutr* 53:1616S-1620S, 1991.
15. Stroup, N.E., Dufour, M.C., Hurwitz, E.S., Desenclos, J.C. Cirrhosis and other chronic liver diseases. *Chronic Disease Epidemiology and Control*, eds Brownson, Remington and Davis, American Public Health Association, Washington DC, 1993.
16. Alpert, J.S., Goldberg, R., Ockene, I.S., Taylor, P. Heart disease in Native Americans. *Cardiology* 78:3-12, 1991.
17. Indian Health Service. Regional differences in Indian Health. 1991. U.S. Dept. Of Health and Human Services, Public Health Service, p. 51.
18. Hrabovsky, S.L., Welty, T.K., Coulehand, J.L. Acute myocardial infarction and sudden death in Sioux Indians. *West J Med* 150:420, 1989.
19. Beslow, N.E., Day, N.E. Statistical Methods in Cancer Research. Vol 1: The design and analysis of cohort studies. IRAC Scientific Publication No. 82, Lyon, France. 1987.
20. Nashold, R.D., Aronson, R.A., Wegehaupt, P.K., Melvin-Shapiro, M. American Indian infant mortality review in Wisconsin: Background, Problems and Process. Center of Health Statistics, Wisconsin Division of Health. Presented at the Public Health Conference on Records and Statistics, Washington DC, July 23, 1993. ❖

Case Report: Hantavirus Pulmonary Syndrome in Wisconsin

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Abstract

In the spring of 1993 an outbreak of a new illness caused by a new pathogen was identified in the southwestern United States. This infection struck relatively young, healthy individuals, was characterized by fever, myalgias, respiratory failure, and a high mortality rate. This illness was caused by a new hantavirus and has been termed hantavirus pulmonary syndrome (HPS).

The virus is carried by rodents, shed in saliva, urine, and feces. Human infection occurs through inhalation of aerosolized virus. The clinical syndrome has many nonspecific signs and symptoms, but does follow a typical course with characteristic laboratory and radiographic findings. Early recognition of this infection is important so maximal supportive care can be initiated. We report the first documented case of hantavirus pulmonary syndrome in Wisconsin and Illinois.

Case Report

The patient was a previously healthy 40 year old man from northern Illinois. He had been well until about one week prior to admission when he presented to his local physician in late May 1996 complaining of fever, myalgias and cough. He was treated with an oral second generation cephalosporin but returned several days later complaining of shortness of breath and worsening cough. He was markedly dyspneic and was admitted to the local hospital for further evaluation.

The past medical history was unremarkable. His only medication was the antibiotic and there were no drug allergies. He did not drink alcohol or smoke tobacco. He worked as a computer programmer and had a small farm which he worked primarily on the weekends. There had been no recent travel outside the area. Family history was non-contributory.

On admission to the local hospital, physical examination showed the patient to be in moderate respiratory distress, with a respiratory rate of 32, a temperature of 100.1 F, a blood pressure of 110/82, and a pulse of 120. The head, neck, abdominal, neurologic, and skin exam were all unremarkable. The lungs revealed bilateral rhonchi, without wheezes or crackles. The cardiac exam showed a regular tachycardia with a 2/6 systolic flow murmur along the left sternal border.

Initial lab data are shown in table 1. Examination of the peripheral blood smear revealed polymorphonuclear leukocytes (PMNS) with toxic granulations and extensive vacuolization, numerous atypical lymphocytes, and thrombocytopenia. Electrocardiogram showed sinus tachycardia, and chest x-ray showed bilateral alveolar infiltrates (figure 1).

He was started on erythromycin, ceftriaxone, and eventually corticosteroids. Worsening respiratory status necessitated intubation eight hours after admission. The following day, he was transferred to the University of Wisconsin Hospital and Clinics. Physical examination at that time revealed a critically ill man, intubated and extremely agitated. He had a temperature of 101.5 F, a blood pressure of 80/40, a pulse of 150, and a respiratory rate of 40. The lung examination revealed good air movement bilaterally with scattered rhonchi and crackles. The heart rate was tachycardic and there was a flow murmur along the left sternal boarder. The skin appeared dusky and cyanotic. The extremities were cool with sluggish capillary refill.

Laboratory data at the time of transfer are shown in table 1. The chest x-ray, (figure 2), demonstrates large, bilateral alveolar infiltrates.

A pulmonary artery catheter was placed, revealing a pulmonary capillary wedge pressure of 15 mm Hg, a cardiac output of 5.8 L/min, a systemic vascular resistance of 952 dyne-sec/cm5. Erythromycin and cefotaxime were administered. High dose dopamine and eventually norepinephrine were required to maintain marginally adequate blood pressures. A broncheoalveolar lavage was grossly unremarkable, and lavage fluid was sent for gram stain and culture.

He remained hypoxic and hypotensive. It was observed that copious amounts of clear fluid were being suctioned from the endotracheal tube. Despite various ventilatory maneuvers, he became increasingly hypoxic over the next several hours. He suffered a cardiac arrest with an initial rhythm of ventricular fibrillation, followed by pulseless electrical activity.

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Resuscitation efforts were unsuccessful and he died just five hours after arrival to our hospital.

At autopsy, the most remarkable findings were noted in the lungs, which revealed complete consolidation. Microscopically, all lung lobes demonstrated severe diffuse alveolar damage. The alveolar walls were lined by hyaline membranes, leading to marked thickening of alveolar septa. There was a moderate cellular infiltrate, with a predominance of mononuclear cells. Variable amounts of edema fluid and fibrin were observed within alveoli.

All gram stains and cultures for bacterial and fungal infections were negative. Serology for hantavirus was positive. An enzyme immunoassay for serum IgM antibodies revealed a titer of 1:6,400. IgG antibodies were not detected. Reverse transcriptase polymerase chain reaction (RT-PCR) performed on necropsy tissues at the Center for Disease Control confirmed hantavirus infection.

Table 1 shows initial lab data.

	labs from local hospital	labs on admission to UWHC
WBC	18,800	40,400
hematocrit	54	48
platelets	36,000	13,000
INR	1.4	1.7
fibrinogen	345	250
FSP	positive	
D-dimer		1-2
Na	126	132
K	4.4	4.1
Cl	92	98
C02	17	13
BUN	34	66
Cr	2.2	4.3
LDH	3339	1932
AST	218	796
lactate		11.7

Arterial Blood Gas Measurements (all 100% FIO2)

	local hospital	UWHC
pH	7.47	6.97
pC02	24	50
pO2	60	64
HCO3	17.5	10.8

Discussion

In May 1993 an outbreak of an acute febrile illness associated with respiratory failure and a high mortality rate was identified in the southwestern United States.[1] A major multi-agency investigation was undertaken and after three weeks researchers at the Centers for Disease Control, using enzyme immunoassays (EIA), detected IgM and IgG antibodies to several hantaviruses in the sera of patients.[2] Reverse transcriptase PCR demonstrated that a unique, previously unknown hantavirus was responsible for these infections.[3] The illness associated with this hantavirus infection has been termed hantavirus pulmonary syndrome (HPS).[4,5] Since that time there have been 140 case reports of confirmed HPS in 22 different states with the vast majority of these cases occurring in the southwestern United States.

Hantaviruses are broadly considered to be under the heading of hemorrhagic fever viruses. Four previously described hantaviruses (Hantaan, Seoul, Puumala, and Dobrava) have been associated with hemorrhagic fever with renal syndrome (HFRS), an illness with mild to no pulmonary symptoms.[6] HPS is caused by at least three hantaviruses: Sin Nombre virus (SNV), which caused the outbreak in the southwestern United States,[3] Black Creek Canal virus (BCCV), which was associated with a case of HPS in Florida,[7] and Bayou virus, recently isolated from HPS cases in Louisiana.[8,9] Our patient was found to have a Sin Nombre variant.

Hantaviruses are transmitted horizontally and maintained in nature by rodents. The virus is shed in saliva, urine, and feces and humans are infected by inhaling rodent excreta. This is more likely to occur under dry conditions when aerosolization is enhanced. Infections have been reported after rodent bites, in laboratory workers exposed to infected rodents, but person to person transmission has not been documented.

The deer mouse (*Peromyscus maniculatus*) is the primary rodent reservoir in for Sin Nombre virus in the southwest United States.[10,11] The cotton rat (*Sigmoden hispidus*) is the rodent reservoir for Black Creek Canal virus in Florida,[12] and the rice rat (*Oryzomys palustrus*) appears to be the rodent reservoir for the Bayou virus.[13]

A study was conducted in Wisconsin and Minnesota to determine the frequency of rodent hantavirus infections.[14] Antibodies to hantavirus were detected in several meadow voles, one white footed mouse, and one Norway rat, with the highest titers to the prospect hill virus, a hantavirus strain discovered in meadow voles in Maryland, and that has not been associated with human disease. All conclusively seropositive rodents were from the Duluth-Superior area.

Rodent trapping was conducted on our patient's farm. Forty white footed mice and 20 deer mice were trapped and tested for hantavirus antibodies. Three of forty white footed mice and four of 20 deer mice were seropositive. Six of the seven seropositive mice were trapped within the farmhouse.

The clinical manifestations of North American hantavirus infection are entirely different from the Hantaan virus which causes hemorrhagic fever with renal syndrome (HFRS). The cardinal manifestations of HFRS are shock, disseminated intravascular coagulation (DIC) and renal failure. Pulmonary involvement is not typically seen and associated mortality is 5-15%.

In contrast, the North American hantaviruses are responsible for HPS, an infection characterized by a febrile illness progressing to sudden, severe, non-cardiogenic pulmonary edema. HPS typically has a prodromal phase in which pulmonary symptoms are absent or mild. It usually lasts 3-6 days with fever and myalgias as the most prominent symptoms. Other symptoms that can be seen include nausea, vomiting, abdominal pain, headache, and dizziness. Symptoms such as rhinitis, sore throat, or meningismus are unusual. Laboratory and radiographic data may be completely normal during the prodrome.

A cardiopulmonary phase follows the prodrome and is marked by cough and shortness of breath that progress rapidly over 24-48 hours. Patients are typically febrile, dyspneic, tachypneic, tachycardic, hypotensive, and hypoxic at this stage. Crackles may be noted on auscultation. The chest x-ray shows bilateral interstitial and alveolar edema with a normal cardiac silhouette. Characteristic laboratory findings include hemoconcentration, thombocytopenia, leukocytosis with atypical lymphocytes and vacuolated PMNS, elevated lactate dehydrogenase, elevated aspartate transaminase, and lactic acidosis. DIC is uncommon and creatinine elevations are usually mild.

The hallmark of HPS is severe non-cardiogenic pulmonary edema. Capillary leakage appears to have a central role in pathogenesis. Patients extravasate large

Fig 1. Chest x-ray showing bilateral increased interstitial and alveolar markings. Heart size is normal.

Fig. 2 Chest x-ray showing progression of bilateral aveolar infiltrates. Heart size is normal.

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amounts of their intravascular volume into the lungs, resulting in hemoconcentration and hypoxia. As in our patient, copious amounts of this fluid have been noted to be suctioned through the endotracheal tubes of intubated HPS patients. Patients typically die from intractable hypotension or hypoxia leading to cardiac dysrhythmias. Mortality from HPS is greater than 50%. For patients who survive the cardiopulmonary phase, recovery is often rapid (days) and complete.

Differentiating HPS from other respiratory infections can be difficult, given the nonspecific symptoms associated with the prodomal stage. It should be suspected in any previously healthy patient presenting with a febrile illness that is followed by the development of pulmonary compromise. A retrospective study was done comparing the clinical features of HPS with pneumococcal pneumonia, influenza, and unexplained ARDS.[15] HPS patients were more likely to complain of nausea, vomiting, and dizziness, and less likely to complain of cough. HPS patients were more likely to have hemoconcentration, thrombocytopenia, and low serum bicarbonate levels. In contrast to septic patients with ARDS, HPS patients typically have depressed cardiac outputs and normal to elevated systemic vascular resistance.[16]

Recognition of the clinical pattern, a history of rodent exposure, and a high index of suspicion are the keys to making the diagnosis. The laboratory diagnosis is made by serologic testing for hantavirus antibodies, but this will take several days. Enzyme immunoassays are performed at the Wisconsin State Lab of Hygiene. Reverse transcriptase PCR and immunohistochemical testing can also be used to confirm the diagnosis.

Treatment is mainly supportive. Patients should be monitored in an intensive care unit, with fluids, vasopressors, oxygen, and mechanical ventilation administered as needed. Judicious use of fluids and earlier use of vasopressors may limit the amount of capillary leakage and pulmonary edema. The nucleoside analog ribavirin given IV has been shown to reduce mortality in patients with HFRS[17], and North American hantaviruses are sensitive to ribavirin in cell culture. An open label trial did not show benefit when given to HPS patients. There is currently a large double blinded, placebo controlled trial underway to further evaluate its efficacy.

In summary, we report the first case of HPS in Wisconsin or Illinois. Our patient had not traveled recently, and presumably acquired the infection on his farm. This report demonstrates this infection can be acquired in the upper midwestern United States and physicians in our area must consider this entity when faced with unexplained respiratory failure. Patients who present with signs and symptoms consistent with HPS should be asked about exposure to rodents. A high index of suspicion and recognition of the clinical pattern is crucial so maximal supportive care can be instituted early.

References

1. Centers for Disease Control and Prevention. Update: outbreak of acute illness--southwestern United States, 1993. *MMWR Morbid Mortal Wkly Rep 1993*; 42:421-4.
2. Centers for Disease Control and Prevention. Update: outbreak of hantavirus infection--southwestern United States, 1993. *MMWR Morbid Mortal Wkly Rep 1993*; 42:441-3.
3. Nichol ST, et al. Genetic identification of a hantavirus associated with an outbreak of acute respiratory illness. *Science* 1993; 262:914-7.
4. Duchin JS, et al. Hantavirus pulmonary syndrome: a clinical description of 17 patients with a newly recognized disease. *N Engl J Med* 1994;330:949-55.
5. Centers for Disease Control and Prevention. Update: hantavirus pulmonary syndrome--United States, 1993. *MMWR Morbid Mortal Wkly Rep* 1993;42:816-20.
6. Bruno P, et al. The protean manifestations of hemorrhagic fever with renal syndrome: a retrospective review of 26 cases from Korea. *Ann Int Med* 1990;113:385-91.
7. Khan AS, et al. Hantavirus pulmonary syndrome in Florida: association with a newly identified Black Creek Canal hantavirus. *Am J Med* 1996;100:46-8.
8. Khan AS, et al. A fatal illness associated with a new hantavirus in Louisiana. *J Med Virol* 1995;46: 81-6.
9. Morzunov SP, et al. A newly recognized virus associated with a fatal case of hantavirus pulmonary syndrome in Louisiana. *J Virol* 1995;69:1980-3.
10. Eliot LH, et al. Isolation of the causative agent of hantavirus pulmonary syndrome. *Am J Trop Med Hyg* 1994;51:102-8.
11. Childs JE, et al. Serologic and genetic identification of Peromyscus maniculatus as the primary rodent reservoir for a new hantavirus in the southwestern United States. *J Infect Dis* 1994;169:1271-80.
12. Rollin PE, et al. Isolation of Black Creek Canal virus, a new hantavirus from *Sigmodon Hispidus* in Florida. *J Med Virol* 1995;46:35-9.
13. Torrez- Martinez N, Hjelle B. Enzootic of Bayou hantavirus in rice rats (*Orycomys palustris*) in 1983 [letter]. *Lancet* 1995;346:780-1.
14. Burek KA, et al. Serologic and virologic evidence of a prospect hill-like hantavirus in Wisconsin and Minnesota. *Am J Med Hyg* 1994;51:286-94.
15. Moolenare RL, et al. Clinical features that differentiate hantavirus pulmonary syndrome from three other acute respiratory illnesses. *Clin Inf Dis* 1995;21:643-9.
16. Hallin GW, et al. Cardiopulmonary manifestations of hantavirus pulmonary syndrome. *Crit Care Med* 1996;24:252-8. ❖

Literature Review: The Long Term Effects of Cocaine Use During Pregnancy--Reasons for Hope

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MEDIA COVERAGE OF infants prenatally exposed to cocaine has created the perception that these infants are irreversibly damaged and beyond hope. At the same time, studies accepted for publication in scientific journals have also tended to focus on the infants adversely affected by prenatal drug exposure. However, many of the adverse effects associated with prenatal cocaine exposure have been also associated with prenatal exposure to alcohol and tobacco. Even so, both the media and journal articles tend to focus disproportionately on the effect of cocaine. The aim of this paper is to urge physicians to re-examine their perceptions of "cocaine babies" and to focus on factors that can be ameliorated by early intervention. Referral recommendations are also suggested.

he newborns of women who use cocaine during pregnancy pay a high price. The serious adverse effects of prenatal cocaine exposure have been widely documented. Nonetheless, it is premature to draw conclusions about the long-term fate of infants prenatally exposed to cocaine. Prospective longitudinal studies assessing the long-term impact of prenatal cocaine exposure on infant and child development are unavailable in 1996. Despite the absence of such studies infants prenatally exposed to cocaine have been described in the media and in papers accepted for publication as "cocaine babies," implying that their course of development is predictably abnormal. Further complicating the clinical picture is the fact that the newborn effects associated specifically with cocaine are difficult to isolate because these infants are also frequently prenatally exposed to tobacco and alcohol. Since the perception that such infants face extensive and irreversible damage has been supported by research accepted for publication and the news media, it is possible that physicians may be biased in their view of these infants' prognosis. The aim of this paper is to present research that supports not only the negative, but also the favorable research findings bearing on the treatment of these children and to urge physicians to re-examine their perceptions regarding "cocaine babies" and the potential impact of these perceptions on their practices.

Though the long-term prognosis for infants prenatally exposed to cocaine is unclear, recent studies suggest that by early and comprehensive intervention, these infants can achieve more positive outcomes. This paper will also provide physicians with referral recommendations for such infants and their families.

Media coverage

Infants prenatally exposed to cocaine made headlines in the late 1980s and early 1990s. These headlines and their stories presented a decidedly negative view of the developmental potential for these infants and as such, may have negatively influenced physicians' perceptions of these infants and their future. For example, a 1989 headline in *The New York Times* stated, "Crack's Toll Among Babies: A Joyless View Even of Toys."[1] *Time Magazine*, in September 1988, reported that even one "hit" of cocaine can irreparably damage a fetus.[2] *The Washington Post* characterized these infants as a potential "human plague almost too horrible to imagine".[4] The media's use of sweeping generalizations to describe infants prenatally exposed to cocaine suggests that these infants are doomed for life and thoroughly robbed of their future potential.[1-4] The conclusions presented by the media need to be questioned, especially by physicians, because these media reports failed to take into account: (a) the effects of prenatal exposure to alcohol and tobacco and (b) the complexity of growth and development.

More importantly, the media's negative portrayal of infants prenatally exposed to cocaine did not occur in isolation. In fact, during this time period, the research

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community focused almost solely on the adverse effects of prenatal cocaine exposure, de-emphasizing the adverse effects that may have been caused by other factors and overlooking the fact that there were infants whose development was within normal limits, despite their prenatal drug exposure. Perhaps the media was taking its lead from the research of the day.

Research

During the late 1980s and early 1990s, the media's portrayal of cocaine-exposed infants may have had its roots in the system that determines which papers are and are not published in scientific journals. A 1989 study by Koren et al. sought to determine the types of research reports accepted for presentation at scientific meetings.[5] He and his colleagues reported that studies that documented no difference between drug-exposed infants and control-group infants were significantly more likely to be rejected for publication than studies that found differences. In other words, it is likely that a number of substance-exposed infants fared well despite their substance exposure and/or benefitted from post-natal intervention, but that the published research did not report such cases.

Since both physicians and the public were presented with rather a one-sided picture of these infants, by some media and scientific journals, it is not surprising that the infants came to be labeled as "cocaine babies." The use of the term "cocaine baby" may have turned dialogue away from at least three important areas of consideration: the known harmful effects of prenatal alcohol and tobacco exposure, the complexities of infant growth and development, and the possible beneficial effect of family intervention. This broader view of the multiple and complex factors that influence infant growth and development is necessary for physicians to provide appropriate treatment and intervention on behalf of such infants.

Furthermore, the singular focus on the impact of prenatal cocaine exposure may have moved public and professional dialogue to a discussion of how to punish pregnant women for their use of illegal drugs rather than towards a discussion of the benefits of family intervention. This paper intends to redirect the focus of physicians to a more balanced assessment of prenatal drug exposure, its implications, and family intervention needs.

Prenatal drug exposure: legal versus illegal drugs

The sudden increase of cocaine use among women of child-bearing age during the 1980s and the media coverage it generated may have diverted attention away from the negative effects on newborns of more commonly used legal drugs such as, alcohol and tobacco. Because many women who use cocaine also smoke cigarettes and drink alcohol, the specific effect of cocaine on a fetus is difficult to determine.[6-13] In fact, the results of a study at Emory University suggested that alcohol, cigarettes, and marijuana had a more significant effect on neonatal behavior than the effect of cocaine.[14] More recently, Jacobson et al.[15] reported that while maternal cigarette smoking and alcohol use contributed to infant low birth weight (LBW), the effect of cocaine on birth size appears to be an "indirect consequence" of premature delivery and poor maternal nutrition. Secondly, a number of the adverse effects associated with prenatal cocaine exposure have also been linked to prenatal exposure to alcohol and tobacco.

The major preventable factor associated with infant LBW is maternal cigarette smoking.[16-19] Infant LBW has been associated with such long-term effects as chronic lung disease, and vision and hearing problems, as well as neuro-developmental problems which may necessitate future special education.[18] Furthermore, a reduction or cessation in maternal cigarette smoking during pregnancy may result in increased birth weight.[20]

Likewise, maternal alcohol use, also commonly associated with cocaine use, has been linked with microcephaly, intrauterine growth retardation,[21-24] impaired infant habituation behavior,[25] and subsequent learning disabilities[cc]. Fetal Alcohol Syndrome is the leading form of preventable mental retardation.[21] The prevalence of tobacco and alcohol use during pregnancy is much higher than that for cocaine. Yet cocaine, *while clearly harmful to the fetus*,[11,27-34] was singled out for its negative effects.

The danger of a sole focus on prenatal cocaine exposure coupled with the perception that such infants are irreversibly damaged can affect a physician's management of these infants and their families. In this instance, a hopeless message may be conveyed to the infant's family, and either an inappropriate referral or no referral will be made. A sole focus on prenatal cocaine exposure not only fails to consider the synergistic effects of prenatal alcohol and tobacco exposure, but also fails to consider the critical impact of the infant's postnatal environment. It is too early at this point in time to draw conclusions regarding the long-term fate of cocaine-exposed infants. In fact, there is cause for hope in light of comprehensive early intervention strategies for these infants and their families.

Reasons for hope

Investigators in a Toronto study sought to assess the impact of maternal social cocaine use on pregnancy outcomes and long-term infant development of exposed infants, as compared to

infants prenatally exposed to marijuana, and to non-drug exposed infants.[35] Social cocaine users were defined as those women who admitted to cocaine use early in their pregnancy, but who after learning that they were pregnant, stopped using cocaine. An assessment of motor and mental skills at 18 months revealed no differences among infants in all three groups. The researchers concluded that the infants of social cocaine users were normal, up to age 18 months, in both physical and cognitive development.

Cautious optimism regarding the long-term prognosis of drug-exposed infants is encouraged by Zuckerman and Frank[36] in response to the results of a longitudinal prospective study of two-year-old children.[37] The study compared three groups of infants: (1) those prenatally exposed to cocaine and marijuana and/or alcohol, (2) those prenatally exposed to marijuana and/or alcohol but not cocaine, and (3) infants whose mothers were drug free during pregnancy. The two groups of drug-exposed infants and their families were enrolled in an ongoing drug treatment and intervention program which included health care and infant developmental assessment, and intervention and follow-up. Although infants in the drug exposed groups did score one to two standard deviations below the drug-free infants in the Mean Mental Developmental Index and the Psychomotor Developmental Index, the overall growth and development of the drug-exposed infants did not differ significantly from the scores of the non-drug exposed infants. The results of this study suggest that drug exposed infants may incur some mental and psychomotor damage from drug exposure, but they can achieve healthy development when they receive comprehensive post-natal intervention.

As a continuation of the preceding longitudinal prospective study, the same group of infants was evaluated at age three.[38] Though not statistically significant, children in the drug exposed groups scored, on average, four to five points lower on the IQ scale than children in the non-drug-exposed control group. However, mean IQ scores were within normal limits for each of the three groups. The investigators used a path analysis model to describe the complex interaction of factors affecting the drug-exposed infant.

The study results suggest that the interaction of an infant's prenatal drug exposure, his postnatal home environment and level of perseverance at a task were the most important factors affecting cognitive ability. The results of these and other studies[13,39-43] support a re-examination of medical providers' perceptions regarding cocaine exposed infants.

Future response

An infant's birth outcome and subsequent growth and development are affected by a complex interaction of biological and environmental factors. For this reason, intervention programs for drug exposed infants and their families need to be comprehensive and interdisciplinary in nature.[24,42] The program services must be delivered in a culturally competent and family-centered manner that includes the mothers, their newborns, and families as partners, in both assessing the families' needs and in designing solutions.

A number of programs which provide comprehensive, family centered services to drug exposed infants and their families are available in Wisconsin. In Milwaukee, physicians and other health care professionals may refer pregnant women and women with newborns to the Positive Options for Women Entering Recovery (POWER) Project. POWER Project services include: case management, advocacy, medical care, drug and alcohol counseling, prenatal and postnatal care coordination, and child development services. Like the POWER Project, Meta House, New Beginnings Clinic, and SAFE Group Services provide comprehensive services to Milwaukee mothers and their newborns. Programs in other parts of the state that provide comprehensive services to drug exposed infants and their families include: the ARC Center for Women and Infants and the ARC Healthy Beginnings Project in Madison, Beacon House in Fond du Lac, Arbor Place in Menomonie, and Transitus House in Chippewa Falls. Other referral options can be obtained from the Wisconsin Department of Health and Family Services.

Conclusion

Prenatal cocaine exposure poses serious risks to infants. Negative media attention and an apparent bias in published research on this topic may have created the perception among physicians that these infants are irreversibly damaged and beyond hope. This negative perception distracted awareness away from the impact of prenatal exposure to alcohol and tobacco, the importance of the infant's postnatal environment and the potential benefits of early intervention. Results of recent work suggest that the effects of cocaine use can, to some extent, be reversed. Cocaine-exposed infants and their families can benefit from broad based and comprehensive intervention services such as those offered by Milwaukee's POWER Project and other programs designed to serve drug exposed infants and their families. Research is needed to identify the necessary and successful components of these and other programs. With comprehensive programs for cocaine-exposed infants, the outlook for these infants

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can be hopeful rather than hopeless.

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References

1. Blakeslee S. Crack's toll among babies: A joyless view of even toys. *The New York Times*, September 17, 1989.
2. Langone J. Crack comes to the nursery. *Time*, September 19, 1988.
3. Milloy C. A time bomb in cocaine babies. *The Washington Post*, September 17, 1989.
4. Yeager RC. Kid's who can't say no. *Reader's Digest*, February, 1991.
5. Koren G, Shear H, Graham K, et al. Bias against the null hypothesis: The reproductive hazards of cocaine. *The Lancet* 1989; 2:1440-43.
6. Zuckerman B, Bresnahan K. Developmental and behavioral consequences of prenatal drug and alcohol exposure. *The Pediatric Clinics of North America* 1991; 38:1387-06.
7. Little BB, Snell LM, Palmore MK. Cocaine use in pregnant women in a large public hospital. *American Journal of Perinatology* 1988; 5:206-07.
8. Chasnoff IJ. Alcohol, tobacco, marijuana, and cocaine in pregnancy. Presented at the Alcohol, Drug Abuse and Pregnancy Clinical Conference. *NAPARE*: Milwaukee, WI, October 20, 1989.
9. Streissguth AP, Grant TM, Barr HM, et al. Cocaine and the use of alcohol and other drugs during pregnancy. *American Journal of Obstetrics and Gynecology* 1991; 164: 1239-43.
10. Feldman JG, Minkoff HL, McCalla S, et al. A cohort study of the impact of perinatal drug use on prematurity in an inner-city population. *American Journal of Public Health* 1992; 82:726-28.
11. Schneider JW, Chasnoff IJ. Motor assessment of cocaine/polydrug exposed infants at age 4 months. *Neurotoxicology and Tercitology* 1992; 14:97-01.
12. Singer LJ, Yamashita TS, Hawkins S, Cairns D, et al. Increased incidence of intraventricular hemor-rage and developmental delay in cocaine-exposed, very low birth weight infants. *The Journal of Pediatrics* 1994; 124: 765-71.
13. Richardson, GA, Day NL. Detrimental effects of prenatal cocaine exposure: Illusion or reality. *J. Am. Acad. Child Adolesc. Psychiatry* 1994; 33: 28-34.
14. Coles CD, Platzman KA, Smith I, et al. Effects of cocaine and alcohol use in pregnancy on neonatal growth and neurobehavioral status. *Neurotoxicology and Teratology* 1992; 14:23-33.
15. Jacobson JL, Jacobson SW, Sokol RJ, Martier SS, et al. Effects on alcohol use, smoking and illicit drug use on fetal growth in black infants. *The Journal of Pediatrics* 1994; 124:757-64.
16. Naeye R. Influence of maternal cigarette smoking during pregnancy on fetal and childhood growth. *Obstetrics and Gynecology* 1980; 57:18-21.
17. Stein ZA, Susser M: Intrauterine growth retardation. Epidemiological issues and public health significance. *Seminars in Perinatology* 1984; 8:7-14.
18. Aronson RA, Uttech S, Soref M. The effect of maternal cigarette smoking on low birth weight and preterm birth in Wisconsin, 1991. *Wisconsin Medical Journal* 1993;92: 613-17.
19. Meyer MB, Jonas BS, Tonascia JA. Perinatal events associated with maternal smoking during pregnancy. *American Journal of Epidemiology* 1976; 103: 464-476.
20. Sexton M, Hebel JR. A clinical trial of changes in maternal smoking and its effect on birth weight. *JAMA* 1984; 251:911-15.
21. Streissguth A, LaDue R. Psychological and behavioral effects in children prenatally exposed to alcohol. *Alcohol Health and Research World* 1985; 10:6-12.
22. Streissguth AP, Sampson PD, Barr HM. Neurobehavioral dose-related effects of prenatal alcohol exposure in humans from infancy to adulthood. *Annals of the New York Academy of Sciences* 1989; 562:145-58.
23. National Institute on Alcohol Abuse and Alcoholism. 6th special report to the U.S. Congress on alcohol and health. Rockville, MD: National Institute on Alcohol and Alcoholism 1987:80-93.
24. Frier MC, Griffith DR, Chasnoff IJ. Alcohol In Utero Drug Exposure: Developmental follow-up and maternal-infant interation. *Seminars in Perinatology* 1991; 15:310-16.
25. Streissguth AP, Barr HM, Martin DC. Maternal alcohol use and neonatal habituation assessed with the Brazelton Scale. *Child Development* 1983; 54:1109-18.
26. Streissguth AP, Barr HM, Sampson, PD, et al. Prenatal alcohol and offspring development: The first fourteen years. *Drug and Alcohol Dependence* 1994, 36: 89-99.
27. Cherukuri R, Minkoff H, Feldman J, et al. A cohort study of alkaloidal cocaine ("crack") in pregnancy. *Obstetrics and Gynecology* 1988; 72: 147-51.
28. Chouteau M, Namerow PB, Leppert P. The effect of cocaine abuse on birth weight and gestational age. *Obstetrics and Gynecology* 1988; 72: 351-54.
29. Zuckerman B, Frank DA, Hingson R, et al. Effects of maternal marijuana and cocaine use on fetal growth. *The New England Journal Of Medicine* 1989; 320:762-68.
30. Hadeed AJ, Siegal SR: Maternal cocaine use during pregnancy: Effect on the newborn infant. *Pediatrics* 1989; 84:205-10.
31. Sehgal S, Ewing C, Waring P, et al. Morbidity of low-birth weight infants with intrauterine cocaine exposure. *Journal of the National Medical Association* 1993; 85: 20-24.
32. Mayes LC, Granger RH, Frank MA, et al. Neurobehavioral profiles of neonates exposed to cocaine prenatally. *Pediatrics* 1993; 91:778-83.
33. Eisen LN, Field TM, Bandstra ES, et al. Perinatal cocaine effects on neonatal stress behavior and performance on the Brazelton scale. *Pediatrics* 1991; 88:477-80.
34. Kliegman RM, Madura D, Kiwi R, et al. Relation of maternal cocaine use to the risks of prematurity and low birth weight. *Journal of Pediatrics* 1994; 124:751-56.
35. Graham, K, Geigenbaum A, Pastuszak A, et al. Pregnancy outcome and infant development following gestational cocaine use by social cocaine users in Toronto, Canada. *Clinical Investigative Medicine* 1992; 15:384-94.
36. Zuckerman B, Frank D. "Crack kids": Not broken. *Pediatrics* 1992:337-39.
37. Chasnoff IJ, Griffith DR, Freier C, et al. Cocaine/polydrug use in pregnancy: Two-year follow-up. *Pediatrics* 1992; 89:284-89.
38. Azuma SD, Chasnoff IJ. Outcomes of children prenatally exposed to cocaine and other drugs: A path analysis of three-year data. *Pediatrics* 1993; 92:396-02.
39. Neuspiel DR, Hamel SC, Hochberg E, et al. Maternal cocaine use and infant behavior. *Neurotoxicology and Teratology* 1991; 13:229-33.
40. Mayes LC, Bornstein MH, Chawarskak, et al. Information processing and developmental assessment of 3 month-old infants exposed prenatally to cocaine. *Pediatrics* 1995; 95:539-45.
41. Richardson GA, Day NL: Maternal and neonatal effects of moderate cocaine use during pregnancy. *Neurotoxiology and teratology* 1991; 13:455-60.
42. Lifschitz MH, Wilson GS, O'Brian Smith E, et al. Factors affecting head growth and intellectual function in children of drug addicts. *Pediatrics* 1985; 75:269-74.
43. Woods NS, Eyler FD, Behnke M, et al. Cocaine use during pregnancy: Maternal depressive symptoms and infant neurobehavior over the first month. *Infant Behavior and Development* 1993;16:83-98. ❖

What's New In...
Emergency Medicine

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Introduction

Advances in emergency medicine are occurring in many diverse areas in both research and clinical practice. A few of the fields within the specialty where these developments are occurring are out-of-hospital care, cardiac arrest research and bedside ultrasonography.

Out-of-hospital care

New developments are occurring at both the national and state levels. Nationally, the Department of Transportation-National Highway Traffic Safety Administration is currently sponsoring projects to revise the training curricula for Emergency Medical Technician-Intermediate and Emergency Medical Technician-Paramedic. This represents the first changes to these training programs since 1985. The revision process has generated controversy around the issue of expanded scope of practice, with some advocating the inclusion of skills such as pelvic examinations and suturing. Pilot testing of the didactic portion of the curricula is occurring now, with field testing to begin shortly. The project is scheduled to be completed in March, 1998.

In the State of Wisconsin, a significant development is the recent passage of Act 200. This legislation permits Emergency Medical Technicians and first responders to honor Do Not Resuscitate orders as long as the patient is identified with a special wrist bracelet and has met other criteria. Details of implementation are currently being finalized by the Emergency Medical Services Section of the Department of Health and Family Services.

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Cardiopulmonary resuscitation

Cardiopulmonary resuscitation (CPR) is one of the exciting areas of research in emergency medicine. Although closed chest CPR has been performed since the 1960s, resuscitation rates from cardiac arrest remain low and few advances have been made in its efficacy. Previous research has focused on the compression phase of CPR (how hard to push? how fast to compress?, how deep to compress?) and little effort has been focused on the decompression phase of CPR. The decompression phase of CPR was viewed as a passive relaxation phase that was necessary prior to the next active compression. This changed in 1990 following an anecdotal report of successful resuscitation from cardiac arrest using a household drain plunger applied to the anterior chest wall.[2] Ambu, Inc. developed a suction cup device (the "cardio pump") to perform this new active compression decompression or ACD-CPR and marketed it in Europe (the device is not available in the United States). Several animal and human studies have suggested that this new form of CPR improves perfusion pressures and may improve resuscitation rates during cardiac arrest.[3-6] One clinical study (terminated prematurely by the Food and Drug Administration due to human consent issues) showed that in patients with < 10 minutes of "down time," hospital discharge rates were 38% with ACD-CPR and 20% with standard CPR.[6] A Canadian study showed no difference in hospital discharge rates between ACD-CPR (4.6%) and standard CPR (3.7%).[7] Despite the differences in results between these two studies, ACD-CPR remains an exciting advance in CPR and future studies will determine its true efficacy during cardiac arrest.

Bystander CPR has been shown to save lives when performed early and correctly.[8] One of the problems with the institution of CPR by bystanders has been the fear of infectious diseases during the ventilation portion of CPR. Several recent animal studies have found that chest compressions alone were as effective as chest compression with ventilation.[9-12] One of the best studies methodologically showed 48 hour survival rates of 87.5% in animals treated with chest compressions and ventilations compared to 80% of animals treated with chest compressions alone.[12] If these animal observations hold true in clinical studies, the performance of bystander CPR will be revolutionized with the hope that the majority of the victims of out-of-hospital cardiac arrest will receive bystander CPR.

Bedside ultrasonography

Within the last decade, several studies have demonstrated the effectiveness of limited sonography performed in the initial evaluation of emergency department patients.[1-8] Early use of this modality has had the greatest impact in time-critical emergencies where sonography is considered the diagnostic test of first choice. These

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include but are not limited to: 1) the evaluation of trauma patients for free intracavitary fluid; 2) evaluation for pericardial effusion/blood in patients with suspected pericardial tamponade; 3) the evaluation of suspected symptomatic abdominal aortic aneurysm; and 4) evaluation of patients for suspected ectopic pregnancy.

When used in the setting of the trauma patient, limited sonography is performed during the initial patient evaluation as other resuscitation efforts take place. The rapid (average time in one emergency department study was four minutes)[6] ultrasound examination of victims of blunt and penetrating trauma is performed to detect free intraperitoneal, pleural, retroperitoneal, and pericardial fluid. The patient can often undergo further diagnostic studies, go to the operating room, or be observed based on the initial ultrasound exam.

The ability to establish the early diagnosis of ectopic pregnancy using physical exam and history alone is poor.[9,10] This has led many authors to recommend early endovaginal ultrasound (EVS) for all women in their first trimester of pregnancy who have abdominal pain or vaginal bleeding[11] or risk factors for ectopic pregnancy, even if they are asymptomatic.[12] Limited bedside EVS can determine the presence or absence of an intrauterine pregnancy (IUP) in generally less than 10 minutes. In up to 70% of such patients, an IUP is present. These patients are then treated for any other complaints (identification of an IUP virtually rules out an ectopic pregnancy) and discharged with appropriate follow up. The remainder of patients require a more detailed evaluation and can receive this in a timely manner. One study has proven a significant reduction of morbidity when bedside EVS, performed by emergency physicians, was applied in all cases of suspected ectopic pregnancy.[2]

The rapid evaluation of patients with suspected symptomatic abdominal aortic aneurysm is necessary for optimal outcome. Immediate sonographic evaluation of the abdominal aorta has been shown to be effective in determining the presence or absence of abdominal aortic aneurysm in the emergency setting.[7] This determination greatly assists the emergency physician in the appropriate and timely disposition of such patients. Patients with hypotension, abdominal pain, and a palpable abdominal mass may go directly to surgery if an abdominal aortic aneurysm is demonstrated sonographically. If the sonographic evaluation reveals a normal aorta, other causes of abdominal pain may be sought.

Determining the presence or absence of pericardial fluid is best accomplished by echocardiography.[13] In the emergency department, this exam will most often take place in the setting of penetrating chest trauma. One study demonstrated that immediate emergency department echocardiography performed on patients with penetrating chest trauma reduced the time to diagnosis of hemopericardium.[8] These patients had an improved survival rate and neurologic outcome compared to a group of similarly injured patients who did not receive immediate emergency department echocardiography.

Additional uses of ultrasound in the emergency department include soft tissue foreign body localization; evaluation of the acute scrotum; and as a guide to performing invasive procedures such as pericardiocentesis, thoracentesis, central venous access, or abscess drainage.[14]

Ultrasound is a valuable diagnostic tool emergency physicians can utilize in the rapid evaluation of selected patients. The early use of ultrasound in certain clinical situations can expedite patient evaluation as well as improve the quality of patient care.

References

Cardiopulmonary resuscitation

1. Kouwenhoven WB, Jude JR, Knickerbocker GG. Closed chest cardiac massage. *JAMA*. 1960; 173:1064-1067.
2. Lurie KG, Lindo C, Chin J. CPR: the P stands for plumber's helper. *JAMA*. 1990; 264:1661.
3. Cohen T, Tucker KJ, Lurie KG, et al: Active compression-decompression: A new method of cardiopulmonary resuscitation. *JAMA*. 1992; 267:2916-2923.
4. Lindner KH, Pfenninger EG, Lurie KG, et al: Effects of active compression-decompression resuscitation on myocardial and cerebral blood flow in pigs. *Circulation*. 1993; 88:1254-1263.
5. Cohen TJ, Tucker, KJ, Redberg RF, et al: Active compression-decompression resuscitation: A novel method of cardiopulmonary resuscitation. *Am Heart J*. 1992; 124:1145-1150.
6. Lurie KG, Shultz JJ, Callaham ML, et al: Evaluation of active compression-decompression CPR in victims of out-of-hospital cardiac arrest. *JAMA*. 1994; 271:1405-1411.
7. Stiell IG, Hebert PC, Wells GA, et al: The Ontario trial of active compression-decompression cardiopulmonary resuscitation for in-hospital and prehospital cardiac arrest. *JAMA*. 1996; 275:1417-1423.
8. Hoekstra J. Bystander CPR: A review. *Resuscitation* 1990; 20:97-113.
9. Berg RA, Kern KB, Sanders AB, et al: Bystander cardiopulmonary resuscitation: Is ventilation necessary? *Circulation*. 1993; 88:1907-1915.
10. Noc M, Weil MH, Tang, W, et al: Mechanical ventilation may not be essential for initial cardiopulmonary resuscitation. *Chest*. 1995; 108:821-827.
11. Chandra NC, Gruben KG, Tsitlik JE, et al: Observations of ventilation during resuscitation in a canine model. *Circulation*. 1994; 90:3070-3075.
12. Berg RA, Wilcoxson D, Hilwig RW, et al: The need for ventilatory support during bystander CPR. *Ann Emerg Med*. 1995; 26:342-350.

Bedside Ultrasonography

1. Mateer JR, Aiman EJ, Brown MH, Olson DW: Ultrasonographic examination by emergency physicians of patients at risk for ectopic pregnancy. *Acad Emerg Med* October 1995; 2(10):867-873.
2. Mateer JR, Valley VT, Aiman EJ, Phelan MB, Thoma ME, Kefer MP: Outcome

analysis of a protocol including bedside endovaginal sonography in patients it risk for ectopic pregnancy. *Acad Emerg Med* March 1996; 27(3):283-289.
3. Timor-Tritsch I, Greenidge S, Admon D, Reuss ML: Emergency room use of transvaginal ultrasonography by obstetrics and gynecology residents. *Am J Obstet Gynecol* 1992; 166:866-872.
4. Jehle D, Guarino J, Karamanoukian H: Emergency department ultrasound in the evaluation of blunt abdominal trauma. *Am J Emerg Med* 1993; 11:342-346.
5. Ma OJ, Kefer MP, Mateer JR, Thoma B: Evaluation of hemoperitoneum using a single- vs multiple-view ultrasonographic examination. *Acad Emerg Med* 1995; 2:581-586.
6. Ma OJ, Mateer JR, Ogata M, Kefer MP, Wittmann D, Aprahamian C: Prospective analysis of a rapid trauma ultrasound examination performed by emergency physicians. *J Trauma* 1995; 38(6):879-885.
7. Shuman WP, Hastrup W Jr, Kohler TR, et al: Suspected leaking abdominal aortic aneurysm: Use of sonography in the emergency room. *Radiology* 1988; 168:117-119.
8. Plummer D, et al: Emergency department echocardiography improves outcome in penetrating cardiac trauma. *Ann Emerg Med* June 1992; 21(6):709-712.
9. Stoval TG, Kellerman AL, Ling FW, Buster JE: Emergency department diagnosis of ectopic pregnancy. *Ann Emerg Med* October 1990; 19:1098-1103.
10. Abbott J, Emmans LS, Lowenstein SR: Ectopic pregnancy: Ten common pitfalls in diagnosis. *Am J Emerg Med* 1990; 8:515-522.
11. Kaplan BC, Dart RG, Moskos M, et al: Ectopic pregnancy: Prospective study with improved diagnostic accuracy. *Ann Emerg Med* July 1996; 28:10-17.
12. Cacciatore B, Stenman U, Ylostalo P: Early screening for ectopic pregnancy in high-risk symptom-free women. *Lancet* February 26, 1994; 343:517.
13. Himelman RB: Echo evaluation of cardiac tamponade. *Cardio* June 1990; 71-76.
14. Mateer JR, Jehle D: Ultrasonography in emergency medicine. *Acad Emerg Med* 1994; 1(2):149-152. ❖

Public Health

The Direct Effects of Nicotine Use on Human Health

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Abstract

Tobacco is one of the leading preventable causes of death in the United States. The role of some of the specific components of tobacco and tobacco pyrolysis in causing human disease has been well described. However, the health risks attributable to ***nicotine alone*** have not been fully determined, especially for long-term use. Nicotine is a potent chemical that has powerful effects on the human body, especially when administered rapidly or at high doses. Although many of these effects are deleterious, others may be beneficial. In certain special populations, such as the developing fetus, or persons with significant cardiovascular disease, nicotine has greater adverse effects. Because of the recent emphasis on using nicotine to treat tobacco dependence, as well as the interest in using nicotine as a possible agent for reducing overall tobacco use, clarifying the effects of long-term nicotine use on human health is important.

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Introduction

Tobacco use has been linked to a variety of human illnesses[1,2] ranging from cancer and cardiovascular disease to premature birth and peptic ulcer disease. The specific contributions of the components of tobacco to morbidity and mortality are debated, but the products of combustion, particularly the polynuclear aromatic hydrocarbons and carbon monoxide, are thought to play major roles[3]. Through its addictive properties, nicotine is a significant cause of continuing tobacco use.[4,5,6] However, the direct, human health effects of nicotine use alone have not been well delineated. Although its pharmacologic and addictive properties have been well described, less has been written on the direct human health effects of nicotine.

Recently, "safer" ways to deliver nicotine to smokers have been discussed. For example, some researchers have suggested that smokeless tobacco could be a safer alternative for persons who will not or cannot stop using tobacco, because the users of smokeless tobacco -- and those around them -- would not be exposed to the products of tobacco combustion.[7] Although smokeless tobacco products do achieve the goal of delivering -- without combustion -- nicotine to the brain, these agents have also been associated with a number of tobacco-induced

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systemic and local adverse health outcomes,[8] arguing against their use as substitutes for cigarettes.

A second, "safer" form of nicotine recently proposed is the smokeless cigarette.[9] This nicotine-delivery device was briefly test-marketed in the mid-1980s. The tobacco industry is currently considering a second-generation smokeless cigarette product for test-marketing. The US Food and Drug Administration (FDA) has raised appropriate concerns about the need to regulate such smokeless cigarette products as drug delivery systems.

Two other forms of nicotine-replacement therapy (nicotine gum and the nicotine patch) have been approved by the FDA as a prescription aid for smoking cessation. Recent meta-analyses [10,11] have deemed these products both safe and effective in the treatment of tobacco addiction. Finally, nicotine delivery systems such as nicotine nasal spray, vapor inhaler, and lozenges are currently under study.[12]

In light of the recent interest in nicotine among health-care providers, regulatory agencies, and the general public, both as a therapeutic aid for assisting smoking cessation and as an addictive drug, a review of what is known about the direct human health effects of long-term nicotine use is important to offer guidance to physicians, policy makers, and consumers.

The addictive properties of nicotine, although an important cause of tobacco addiction and subsequent health problems, will not be discussed in this report. Similarly, the acute effects of nicotine (e.g., nicotine poisoning [4] and "green-tobacco syndrome"[13] will not be discussed further.

We will first describe nicotine's structure and metabolic and physiologic effects, then review facts relating to the role of nicotine in human disease. Finally, we will report nicotine's effects in special populations.

NICOTINE: STRUCTURE AND METABOLISM

The structure and function of nicotine have been extensively described in the literature.[14] In brief, nicotine in tobacco exists mainly as a water- and lipid-soluble alkaloid, a tertiary amine composed of a pyridine and a pyrrolidine ring (figure 1). Its uptake via inhalation (e.g., cigarette smoking) or across mucous membranes (e.g., smokeless tobacco) is rapid; absorption is pH dependent.[15] Once absorbed, it is distributed extensively throughout the body. It freely crosses the placenta. Nicotine readily crosses the blood-brain barrier and is distributed throughout the brain.[14]

Nicotine is metabolized in the liver and lung, although some is excreted unchanged in the urine. The primary metabolites are cotinine and nicotine-*N*-oxide, both pharmacologically inactive.[15]

NICOTINE: PHYSIOLOGIC EFFECTS

The physiologic effects of nicotine have been well studied, both in the laboratory and in controlled clinical settings. An overview of these effects is helpful for understanding the health effects of nicotine use. Table 1 summarizes nicotine's physiological effects and potential risks and benefits by organ system.

Central nervous system

Nicotine acts on binding sites or receptors throughout the nervous system, interacting with specific receptors. Nicotine appears to have a stimulant effect on the central nervous system, as shown in a variety of animal and human studies.[4] It appears to be capable of stimulating the release of several pituitary and hypothalamic hormones. In addition, nicotine might alter brain energy metabolism and electrophysiology.[4]

Cardiovascular system

Nicotine stimulates autonomic ganglia and skeletal neuromuscular junctions throughout the body by binding to acetylcholine receptors. It also appears to stimulate the sympathetic nervous system via the adrenal medulla.[15] This stimulation can lead to increased heart rate, myocardial contractility, and vascular tone, as well as greater platelet aggregation and altered lipid and fatty acid metabolism.[16]

Pulmonary system

Nicotine has significant effects on the bronchial epithelium, increasing vascular and cellular permeability, inducing an inflammatory response, and affecting repair mechanisms.[4]

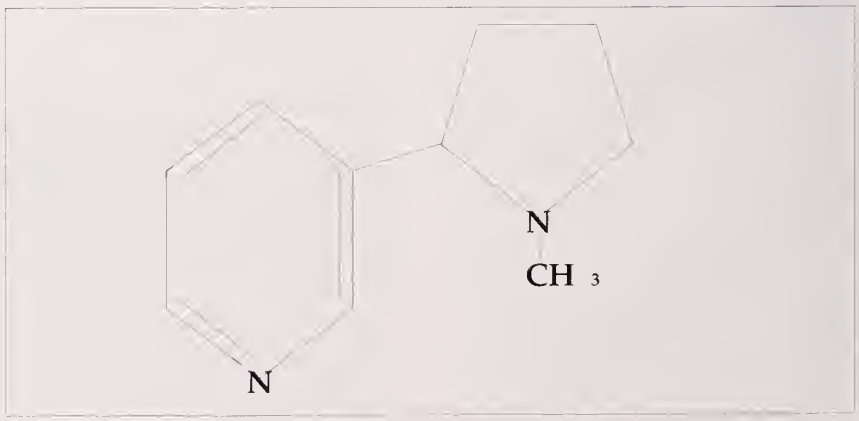

Fig 1. Structure of nicotine

Table 1: Human Health Effects of Long-Term Nicotine Administration		
Organ System	Physiologic Effects	Potential Risks and Benefits
Central Nervous System	Binds to a variety of receptors Overall stimulant effect Stimulates release of several hypothalamic and pituitary hormones Alters electrophysiology and psychophysiologic reactivity	Might cause sleep disturbance Might cause sleep apnea --might be protective Associated with Alzheimer's disease and tardive dyskinesia Might be protective for Parkinson's disease
Cardiovascular System	Increases heart rate, contractility, vascular tone	Might worsen pre-existing coronary artery disease Might exacerbate arrhythmias Might worsen peripheral vascular disease
Pulmonary System	Increases vascular and cellular permeability Induces inflammatory response Affects repair mechanisms	Might play a role in airways disease
Gastrointestinal System	Increases basal acid secretion Decreases mucosal blood flow Inhibits mucosal prostaglandin synthesis Reduces pancreatic bicarbonate secretion Reduces lower esophageal and pyloric sphincter pressures Lowers motility	Might be a factor in peptic ulcer disease Might cause delayed ulcer healing Might cause esophagitis Might be protective or a therapeutic aid for ulcerative colitis
Endocrine and Reproductive Systems	Alters hormone production Affects placental blood flow	Might reduce birth weight Might affect developing nervous system
Other	Increases platelet aggregation Alters lipid and fatty acid metabolism Stimulates adrenal cortex and medulla Increases catecholamine release	Might delay skin wound healing Might exacerbate hyperthyroidism or insulin-dependent diabetes mellitus

Gastrointestinal system

Data from several animal studies have indicated mechanisms by which nicotine affects the gastrointestinal system. These mechanisms include increasing basal acid secretion, reducing pancreatic bicarbonate secretion, inhibiting mucosal prostaglandin synthesis and decreasing mucosal blood flow, and lowering esophageal and pyloric sphincter pressures. Further, nicotine might reduce gastrointestinal motility.[4]

Endocrine system

Nicotine exerts effects on nearly all components of the endocrine and neuroendocrine systems, including catecholamines, corticosteroids, serotonin, and several pituitary

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hormones. Some of these effects are mediated through the hypothalamic-pituitary axis; some are produced by direct effects on the adrenal cortex and medulla.[4]

Other physiologic effects
Nicotine can produce skeletal muscle relaxation, or it can enhance tension. It can also alter psychophysiologic reactivity.[4]

NICOTINE: HUMAN HEALTH EFFECTS

The *in vivo* actions of nicotine are complex and depend on dose, method and rapidity of administration, target organ, prevalent autonomic tone, and prior exposure history. Thus, the actual human health effects and diseases resulting from nicotine use are not straightforward. These health effects are summarized in table 1.

Central nervous system
The consequences of long-term, nicotine-induced central nervous system stimulation are unclear. Sleep disturbances and sleep-disordered breathing, both observed in smokers, may be due in part to the stimulant effects of nicotine[17] or to nicotine withdrawal. Others have suggested that nicotine might protect against sleep apnea.[18]

Nicotine has been both positively and negatively associated with psychological disorders, including schizophrenia and Tourette's syndrome. Nicotine might increase the risk of Alzheimer's disease and tardive dyskinesia, but appears to reduce the risk of Parkinson's disease.[19]

Cardiovascular system
The action of nicotine on the heart and blood vessels has been studied extensively. Through its effects on heart rate and myocardial contractility, vascular tone, catecholamines, coagulation and platelet aggregation, as well as lipid and fatty acid metabolism, nicotine may contribute to the coronary heart disease caused by cigarette smoking, and may play a role in acute coronary events.[16] However, the long-term cardiovascular health effects of long-term nicotine use are not well understood.

A study of Swedish construction workers indicated that smokeless tobacco users had a higher risk of death from cardiovascular disease, though lower than the risk for smokers.[20] However, another study from Sweden did not indicate an increased risk of death from myocardial infarction among persons who used smokeless tobacco compared with non-smokers.[21] Further, animal models have not consistently demonstrated nicotine's adverse cardiac effects.

Some authors[16,22] have postulated that the effects of nicotine on the cardiovascular system might be a function of the dosing modality, the rapidity with which peak blood levels of the drug are achieved, or tolerance. For example, smoking cigarettes results in a more rapid increase in and higher absolute levels of plasma nicotine than that achieved by chewing nicotine gum[23] or applying the nicotine patch.[24] Rapidly increasing blood levels of nicotine achieved by smoking cigarettes exacerbate the acceleration of heart rate and increase in blood pressure produced by nicotine.[22] These findings might explain the differences that exist between short-term animal and human studies and long-term human health effects.

The role of nicotine in hypertension is similarly supported by the known pharmacological actions of nicotine, but not well documented in animal or human studies.[25]

Theoretically, nicotine's potentially hypertensive actions and vascular effects could increase the risk of stroke.[16] However, this theory has not been studied adequately.

Pulmonary system
Nicotine's effects on bronchial epithelium suggest that nicotine can play a role in the development of chronic lung disease, although this claim remains unclear. Studies have suggested that nicotine alone can increase airway resistance, which worsens pulmonary function in persons with existing lung disease[4].

Gastrointestinal system
Cigarette smoking is a risk factor for peptic ulcer disease, as well as for delayed healing, therapeutic failures, and relapse of ulcers. Nicotine's effects on the gastrointestinal system, including increasing acid secretion while decreasing bicarbonate secretion, prostaglandin synthesis, and mucosal blood flow, might account for these findings. Further, nicotine's ability to reduce lower esophageal and pyloric sphincter pressures might lead to reflux esophagitis.[4]

The route by which nicotine is administered could affect ulcer formation. Local effects of nicotine might be a factor, since orally ingested nicotine, particularly via nicotine gum, can lead to higher gastric levels than inhaled or transdermally absorbed nicotine.[4]

Nicotine possibly protects smokers against the development of ulcerative colitis; some studies indicate that smokers have a lower incidence of this disease [18,26].

Other health effects
Nicotine's role as a carcinogen or co-carcinogen is controversial. Although some studies have suggested that nicotine and its primary metabolites might possess weak tumorigenic activity, others have failed to demonstrate carcinogenic properties. Data from a study of Swedish construction workers indicate no increase in cancer mortality among smokeless tobacco users.[20]

Nicotine might act as a co-carcinogen, but this has not been con-

sistently demonstrated in laboratory experiments. During processing and pyrolysis of tobacco, nicotine can be converted to N-nitrosamines, which are known carcinogens. Whether nicotine-derived nitrosamines contribute significantly to the cancer risks of tobacco smoking is unclear.[4]

The relationship between smoking and delayed wound healing is well recognized.[27] Nicotine, as a vasoconstrictor, can impair skin blood flow, which adversely affects wound healing. Further, nicotine-induced platelet aggregation might cause microvascular occlusions and ischemia in compromised tissues.

Recent reports have suggested that nicotine patches and nasal spray can produce local irritation, although the contribution of nicotine itself to these effects has not been determined.[28,29]

Table 2: Potential High-Risk Conditions for Adverse Effects from Nicotine Use

Recent, significant cardiovascular disease
Significant cardiac arrhythmias
Accelerated hypertension
Peripheral vascular disease
Vasospastic disease
Active peptic ulcer disease
Hyperthyroidism
Insulin-dependent diabetes mellitus
Pheochromocytoma
Pregnancy and developing fetuses
See references 16,28.

NICOTINE: EFFECTS IN SPECIAL POPULATIONS

Nicotine has different physiologic and health effects in certain individuals. Some persons are at higher risk for adverse health effects than others. These high-risk populations or conditions include developing fetuses, persons with a history of unstable coronary artery disease, and persons with other pre-existing diseases (table 2).

The developing fetus

The relationship between smoking and low birth weight, prematurity, and miscarriage has been well established[30], although nicotine's role in these conditions is unclear. Nicotine might be a factor in low birth weight--the level of maternal serum cotinine correlated with reduced birth weight in one study.[31] Nicotine's effects on the vascular system, which might affect placental development and sufficiency, could be an explanation for some of the reproductive problems caused by cigarette smoking.

Although nicotine adversely affects fetal development in some animal models, its association -- and that of cigarette smoking -- with human congenital malformations is unclear. Still, the FDA has classified the nicotine patch as a Category D (positive evidence of human fetal risk) substance.[28]

Nicotine might have an adverse effect on the developing brain and nervous system *in utero*[32,33], leading to behavioral or electrophysiological alterations .[4]

Persons with pre-existing cardiovascular disease

Studies have reported that patients with stable coronary artery disease can safely use the nicotine patch.[28,34] However, isolated cases of acute myocardial infarction among persons with coronary artery disease who smoked while using the nicotine patch have been reported.[28,35] Other researchers have reported that nicotine affects the cardiovascular system of persons with coronary artery disease differently than that of healthy persons.[15] Cases of cardiac arrhythmias, particularly atrial arrhythmias, have been reported in persons who use nicotine gum.[4]

Although smoking does not appear to be a risk factor for the development of chronic hypertension, progression of chronic hypertension to accelerated hypertension or the exacerbation of hypertension caused by pheochromocytoma has been documented in the setting of tobacco use. This has been postulated to occur through nicotine's effects on vascular tone, renal blood flow, or sympathetic nervous system activity.[4]

Researchers believe that nicotine exacerbates Buerger's disease (thromboangiitis obliterans), a vasospastic disorder primarily affecting the extremities.[36]

Persons with other pre-existing diseases

Nicotine appears to have effects on the endocrine system which may have implications for persons with certain diseases. For example, by stimulating catecholamine release from the adrenal medulla, nicotine may adversely affect persons with hyperthyroidism or insulin-dependent diabetes mellitus.[4,37]

Conclusion

Nicotine is under intense scrutiny, both because it is the addictive substance in cigarettes and because of its role as a therapeutic agent to aid tobacco dependence. The distinction between tobacco use and nicotine use deserves emphasis

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particularly since some authors have advocated smokeless tobacco as a "safer" form of nicotine, a position not supported by data.

Nicotine is a potent chemical that has powerful effects on the human body, especially when administered rapidly or at high doses. Although many of these effects are deleterious, others may be beneficial. In aggregate, the health effects of long-term administration of nicotine alone are less harmful than the effects of long-term tobacco use. Many of the diseases linked to long-term nicotine use in humans are not life-threatening and are curable or at least treatable. Because of the uncertainty about long-term nicotine exposure, however, future research and review by the U.S. Food and Drug Administration is appropriate. This research is of current importance because nicotine-replacement therapy is now an over-the-counter product.

In certain populations (e.g., pregnant women and persons with unstable coronary artery disease) nicotine should be used only after careful consideration. However, as Benowitz and Hughes have suggested, and from a "harm reduction" perspective, the unequivocal risks of smoking must be weighed against the potential risks of using nicotine alone.[37,38,39]

References

1. U.S. Department of Health and Human Services. Reducing the health consequences of smoking: 25 years of progress. A report of the Surgeon General. U.S. Department of Health and Human Services, Public Health Service, Office on Smoking and Health. DHHS Publication No. (CDC) 89-8411, 1989.
2. Novotny TE. Tobacco use. In: Brownson RC, Remington PL, Davis JR (eds). Chronic disease epidemiology and control. American Public Health Association, 1983; pp. 199-220.
3. U.S. Department of Health and Human Services. The health consequences of smoking: Cancer. A report of the Surgeon General. U.S. Department of Health Education and Welfare, Public Health Service, Office on Smoking and Health. DHHS Publication No.(PHS) 82-50179, 1982.
4. U.S. Department of Health and Human Services. The health consequences of smoking: Nicotine addiction. A report of the Surgeon General. U.S. Department of Health and Human Services, Public Health Service, Office on Smoking and Health. DHHS Publication No. (CDC) 88-8406, 1988.
5. Henningfield JE, Cohen C, Slade JD. Is nicotine more addictive than cocaine? *Br J Addict* 1991;86(5):565-569.
6. Benowitz NL. Cigarette smoking and nicotine addiction. *Med Clin North Am* 1992;76(2):415-437.
7. Rodu B. An alternative approach to smoking control. *Am J Med Sci* 1994;308(1):32-34.
8. U.S. Department of Health and Human Services. The health consequences of using smokeless tobacco: A report of the advisory committee to the Surgeon General. U.S. Department of Health and Human Services, Public Health Service, Bethesda, Maryland. NIH Publication No. 86-2874, 1986.
9. Hilts PJ. Less smoke and less tar, but full dose of nicotine. *New York Times* Nov 27, 1994:1,13.
10. Silagy C, Mant D, Fowler G, Lodge M. Meta-analysis on efficacy of nicotine replacement therapies in smoking cessation. *Lancet* 1994; 343(8890): 139-142.
11. Fiore MC, Smith SS, Jorenby DE, Baker TB. The effectiveness of the nicotine patch for smoking cessation: a meta-analysis. *JAMA* 1994;271(24): 1940-1947.
12. Russell MAH. The future of nicotine replacement. *Br J Addict* 1991;86: 653-658.
13. Gehlbach SH, Williams WA, Perry LD, Woodall JS. Green-tobacco sickness: an illness of tobacco harvesters *JAMA* 1974;229: 1880-1883.
14. Benowitz NL. Pharmacological aspects of cigarette smoking and nicotine addiction. *N Eng J Med* 1988;319: 1318-1330.
15. Khosla S, Laddu A, Ehrenpreis S, Somberg JC. Cardiovascular effects of nicotine: relation to deleterious effects of cigarette smoking. *Am Heart J* 1994;127: 1669-1672.
16. Benowitz NL. Toxicity of nicotine: implications with regard to nicotine replacement therapy. *Prog Clin Biol Res* 1988;261: 187-217.
17. Wetter DW, Young TB. The relation between cigarette smoking and sleep disturbance. *Prev Med* 1994;23(3): 328-334.
18. Jarvik ME. Beneficial effects of nicotine. *Br J Addict* 1991;86(5): 571-575.
19. Newhouse PA, Hughes JR. The role of nicotine and nicotinic mechanisms in neuropsychiatric disease. *Br J Addict* 1991;86(5): 521-526.
20. Bolinder G, Alfredsson L, Englund A, de Faire U. Smokeless tobacco use and increased cardiovascular mortality among Swedish construction workers. *Am J Public Health* 1994;84(3): 399-404.
21. Huhtasaari F, Asplund K, Lundberg V, Stegmayr B, Wester PO. Tobacco and myocardial infarction: is snuff less dangerous than cigarettes? *BMJ* 1992;305: 1252-1256.
22. Wonnacott S, Russell MAH, Stolerman IP (eds). Nicotine psychopharmacology: Molecular, cellular, and behavioral aspects. Oxford University Press, Oxford, 1990.
23. Russell MAH, Feyerabend C, Cole PV. Plasma nicotine levels after cigarette smoking and chewing nicotine gum. *BMJ* 1976;1(6017): 1043-1046.
24. Palmer KJ, Buckley MM, Faulds D. Transdermal nicotine: a review of its pharmacodynamic and pharmacokinetics properties and therapeutic efficacy as an aid to smoking cessation. *Drugs* 1992;44(3): 498-529.
25. U.S. Department of Health and Human Services. Smoking and health: A report of the Surgeon General. U.S. Department of Health and Human Services, Public Health Service, Office on Smoking and Health. DHHS Publication No. (PHS) 79-50066, 1979.
26. Nakamura Y, Labarthe DR. A case-control study of ulcerative colitis with relation to smoking habits and alcohol consumption in Japan. *Am J Epidemiol* 1994;140: 902-911.
27. Silverstein P. Smoking and wound healing. *Am J Med* 1992;93(1A): 22S-24S.
28. Fiore MC, Jorenby DE, Baker TB, Kenford SL. Tobacco dependence and the nicotine patch: clinical guidelines for effective use. *JAMA* 1992;268(19): 2687-2694.
29. Hjalmarson A, Franzon M, Westin A, Wiklund O. Effect of nicotine nasal spray on smoking cessation. *Arch Intern Med* 1994;154: 2567-2572.
30. U.S. Department of Health and Human Services. The health benefits of smoking cessation. A report of the Surgeon General. U.S: Department of Health and Human Services, Public Health Service, Office on Smoking and Health. DHHS Publication No. (CDC) 90-8416, 1990.
31. Haddow JE, Knight GJ, Palomaki GE, Kloza EM, Wald NJ. Cigarette consumption and serum cotinine in relation to birth weight. *Br J Ob Gyn* 1987;94(7): 678-681.
32. Mactutus CF. Developmental neurotoxicity of nicotine, carbon monoxide, and other tobacco smoke constituents. *Ann N Y Acad Sci* 1989;562: 105-122.
33. Lichtensteiger W, Ribary U, Schlumpf M, Odermatt B, Widmer HR. Prenatal adverse effects of nicotine on the developing brain. *Prog Brain Res* 1988;73: 137-157.
34. Rennard S, Daughton D, Fortmann S, Killen J, Petty T, Silvers W, Repsher L, Stillman D, Cousey E, Knowles M, Rolf C. Transdermal nicotine enhances smoking cessation in coronary artery disease patients. *Chest* 1991;100: 5S.
35. Shea RW Sturdy Memorial Hospital Media Alert June 8, 1992. Press release.
36. Shionoya S. Buerger's disease: Diagnosis and management. *Cardiovasc Surg* 1993;1(3): 207-214.
37. Benowitz NL. Nicotine replacement therapy during pregnancy. *JAMA* 1991;266: 3174-3177.
38. Hughes JR. Risk-benefit assessment of nicotine preparations in smoking cessation. *Drug Saf* 1993; 8(1): 49-56.
39. Des Jarlais DC. Editorial: Harm reduction--a framework for incorporating science into drug policy. *Am J Pub Health* 1995;85(1): 10-11.❖

MetaStar Matters
Initial Management of Sepsis

Cindy Etsinger, RN, Pat Martin, MS, Joseph Blustein, MD, MS, and Jay A. Gold, MD, JD, MPH, Madison

Sepsis is a major cause of death for the elderly in Wisconsin. In 1992, it was a significant cause of morbidity and mortality in Wisconsin Medicare beneficiaries. Review of Medicare claims data from July 1993 through June 1994 revealed a 17% mortality rate from sepsis in those 65 and older.[1]

Overall, more than 25 percent of septic patients die and one third of the deaths occur within the first 48 hours after the onset of symptoms.[2] Prompt and aggressive treatment of patients with early sepsis is important with initiation of antibiotic treatment as soon as appropriate cultures have been obtained.[2]

The goal of this project was to improve the timing of antibiotic administration in patients admitted to the hospital with sepsis. A study group of experts representing infectious disease physicians and infection control personnel was convened to assist with the development of the project and indicator. It was the consensus of the study group that prompt antibiotic treatment was essential, with the administration of antibiotics within 2 hours after arrival being a realistic expectation.

In order to assess the presence of an opportunity for improving antibiotic administration time in patients admitted with sepsis in Wisconsin, we identified a statewide sample of 61 randomly selected cases with discharges from July 1993 through June 1994. Analysis showed that only 25 percent of those patients admitted with sepsis received antibiotics within 2 hours after arrival with a median administration time from arrival to antibiotic of 4 hours.

A single quality indicator evolved from the consensus of the study group for this project. This indicator was defined as the percentage of patients receiving antibiotics within 2 hours after arrival to the hospital. Additional information was collected to assist hospitals in examining their process for administering antibiotics and to identify possible causes for delay. This included: 1) median time from arrival to antibiotic administration; 2) median time from arrival to blood culture draw and 3) median time from blood culture draw to antibiotic administration.

In January of 1995, acute care hospitals throughout the state of Wisconsin were invited to participate in the project, and seven hospitals accepted the invitation. Medical records were requested from each hospital for all Medicare discharges billed with an admitting diagnosis of sepsis between October 1, 1993 and September 30, 1994. Criteria for inclusion in the project were: 1) Medicare patient 65 or older; 2) admitting diagnosis of sepsis and 3) not on antibiotics prior to arrival. 141 cases met these criteria for baseline.

Results of the baseline data analysis showed that of those cases meeting the three criteria, 31 (22%) received antibiotics within 2 hours after arrival, with a range among the seven hospitals of 14 to 60 percent. The median time from arrival to antibiotic administration was 4.2 hours, with hospitals ranging from 1.6 to 5.3 hours. The median time from arrival to blood cultures was one hour, with a range of 0.4 to 1.5 hours, while the median time from blood culture to antibiotic administration was 2.6 hours.

The results of the project were shared with the hospitals during on-site visits and telephone conferences, presented by a physician Clinical Coordinator . The audience for the presentations included emergency room physicians, nursing staff, pharmacy, and laboratory personnel. The message emphasized the importance of administering antibiotics promptly. Hospitals were encouraged to look at their process for administering antibiotics, and to develop appropri-

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ate interventions in those areas that showed an opportunity for improvement.

Each hospital examined their internal processes and developed appropriate interventions. Many of the interventions focused on decreasing the median time from arrival to antibiotic administration and included the development of critical pathways, policy revision, and staff education.

Follow-up was conducted to accommodate the individual needs of the participating hospitals. The main factor in determining the follow-up period was when specific interventions were implemented. Each hospital is to receive a report of their follow-up results to assess the effectiveness of their interventions and to identify additional opportunities for improvement if they exist. The report will include comparative data with specific sample sizes.

In July of 1996, project follow-up began for three of the hospitals participating in the project. Follow-up for the remaining hospitals is pending. Follow-up data collection for these three hospitals began after their interventions were implemented and included all cases with discharges from January 1, 1996 through June 30, 1996. The data were collected and analyzed identically to baseline. A total of 23 cases were included.

All three hospitals showed a decrease in median time from arrival to administration of antibiotics (Figure 1), as well as a decrease in the median time between blood culture draw and administration of antibiotics (Figure 2). Decrease in median time for arrival to blood cultural in Hospitals E and G was also noted.

One of the three hospitals showed an improvement in the rate of patients receiving antibiotics within 2 hours which was most likely a result of addressing this issue directly in their intervention.

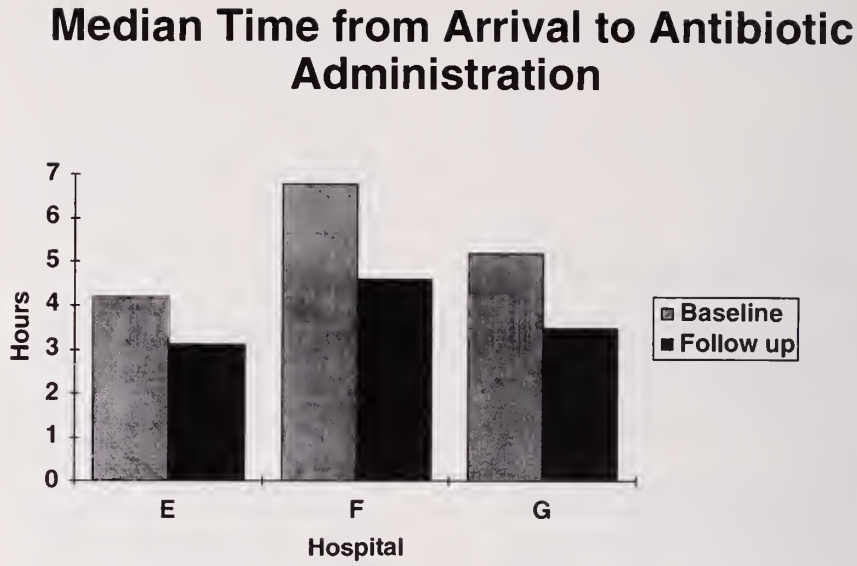

Figure 1

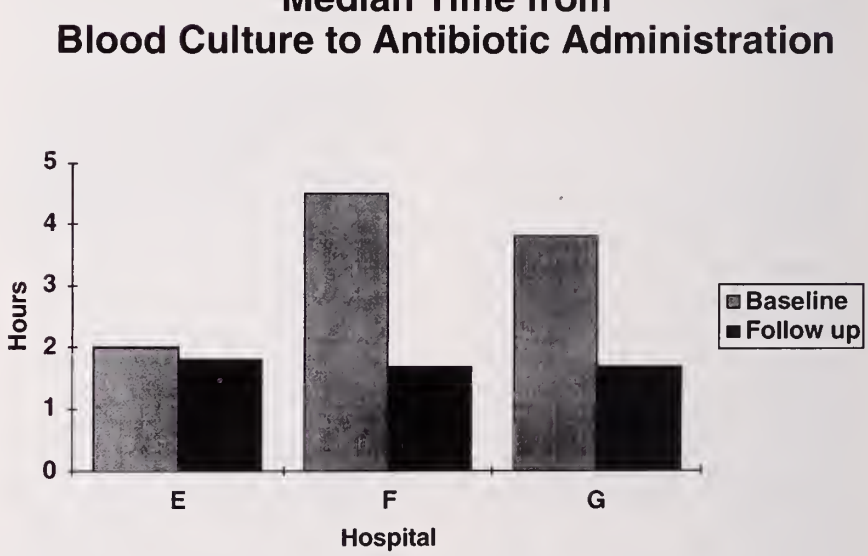

Figure 2

While the differences between baseline and follow-up may not be statistically significant at $p<0.05$ level, follow-up results are encouraging, showing a decrease in the median times for administration of antibiotics to septic patients in all three hospitals. The interventions changed processes which should have long lasting effects and improve the overall health of the Medicare beneficiaries in Wisconsin.

References

1. Mortality Database - NCHS. Wonder. Centers for Disease Control.
2. Munford S. Sepsis and septic shock. Harrison's Principles of Internal Medicine. 13th edition, Isselbacher KJ, Braunwald E. Et. Al. (Eds.), McGraw Hill, Inc. 1994; 511-515.❖

Advance Directives for Patients

Sally Wencel, JD, SMS Outcomes

ALTHOUGH THE IDEA of "advance directives" is becoming more familiar to the public at large, this area of the law is changing at a rapid pace. A recent survey noted that patients, regardless of age or economic distribution, are interested in executing advance directives. More important, **patients expect their physician to be a source of information and advice on this often confusing topic.** This article explains the most recent versions of the living will and power of attorney for health care law and the court-made law applicable to Wisconsin residents.

As an additional concern, the federal Omnibus Budget Reconciliation Act of 1990 included a provision that requires certain health care providers other than physicians and clinics to notify Medicaid and Medicare patients about the availability of advance directives and to maintain written policies and procedures regarding the use of advance directives. Effective in December, 1991, this law applies to hospitals, skilled nursing facilities, home health agencies, HMOs, and hospices. Although physicians are not included in the federal mandate, patients are often referred to their personal physicians for more information concerning advance directives after being given their "medical Mirandas" by the admitting or enrolling facility.

What is an "advance directive?

As the term is used in this article, advance directive means a document executed by a competent adult authorizing the withholding of medical treatment or naming another to make health care decisions on their behalf, or one document that may perform both functions. In Wisconsin, two such advance directives are recognized by statute -- the living will and the power of attorney for health care.

Is it necessary to have a valid advance directive to make health care decisions?

The 1990 US Supreme Court decided in *Cruzan* v. *Director, Missouri Department of Health* the right to make health care decisions, including the decision to refuse further life-sustaining treatment, is a constitutionally protected right to liberty. In weighing this right against the state's interest in preserving life, the Court found that each state may determine what sort of evidence is necessary to document an incompetent person's health care wishes -- the "clear and convincing" evidence test. In a concurring opinion, Justice O'Connor referred to "living wills" (also known as a "declaration to physicians") as an example of the sort of "clear and convincing" evidence of a person's wishes that may be required by a state such as Missouri, the state out of which the Cruzan case arose.

Statutory documents, however, are not the only source of clear and convincing evidence of a person's health care wishes. Medical records in which discussions between patient and health care provider are documented can be excellent sources of information concerning health care wishes. The best situation is for the patient to have statutory documents where immunity is given to health care providers for abiding by presumably valid instruments.

In 1992, the Wisconsin Supreme Court looked in *The Matter of the Guardianship of L.W.* at whether someone who never executed an advance directive and may never have been competent to form health care desires could have life-sustaining treatment withheld. The Court decided that a guardian appointed to make decisions on behalf of an incompetent may determine that withholding life-sustaining (or prolonging) treatment may not be in a patient's best interests. In this situation, the guardian may make the decision to withhold or terminate feeding tubes and other medical treatment. In addition to expanding a guardian's decision making in this way, the Court also found it unnecessary for trial courts to review a guardian's decision, particularly if ethics committees and friends and family are consulted, unless there is reason to question this decision. The *L.W.* decision reflects a certain trust of the existing modes for making treatment decisions -- one where court interference is necessary only when there is dispute between the interested parties.

The power of attorney for health care

In 1989, Wisconsin first enacted law creating a health care proxy instrument -- the power of attorney for health care -- which allows a competent person (the "principal") to designate another (the "health care agent") to make health care decisions in the event the principal becomes incapable of communicating his or her health care wishes. This power of attorney for health care instrument replaces the execution of earlier versions of the durable power of attorney for health care although those documents executed before the 1989 law's enactment continue to be valid until revoked. Since its original enactment, the power of attorney for health care law has undergone further revisions, including a revision of the statutory form itself.

A power of attorney for health

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care document may grant decisionmaking power to the health care agent not available through other legal instruments. For one example, the principal may authorize the health care agent to place him or her in a nursing home for more than 30 days. Under the ordinary power of attorney document, this nursing home placement is not permitted. This obviates the need to seek a court-appointed guardian to authorize admission to a nursing home. The principal may authorize the health care agent to order the withdrawal of nonorally ingested nutrition and hydration if these measures are not needed for palliative purposes. The law also includes several limits, discussed later in this article, that were the result of long debate over social and moral values that can be defined through this legal instrument. Finally, the health care agent under an implemented power of attorney for health care may consent for HIV testing and test release as well as consent for release of other health care information.

The State Division of Health is directed to print and distribute the statutorily defined power of attorney for health care form which may be obtained by sending a self-addressed envelope and request to: Power of Attorney, Division of Health, Post Office Box 309, Madison, Wisconsin 53701. These forms may be photocopied or otherwise reproduced for use.

Other organizations may provide forms for distribution so long as the forms include the required disclosure language and otherwise conform to the statute. A private attorney may draft a document for his or her client that does not follow the statutory form if the attorney certifies that he or she has advised the principal of his or her rights or if the document contains the disclosure language referred to above.

Durable powers of attorney for health care executed before the law's April 12, 1990 effective date are valid.

Executing a power of attorney for health care

Anyone of sound mind and at least eighteen years of age may execute a power of attorney. The law requires that several conditions be met for the document's proper execution, such as it must be signed before two witnesses who are not related to the principal, have no knowledge of any entitlement to the principal's estate, are not financially responsible for the principal, are not the health care agent named in the document, and are not the principal's health care provider or an employee of a health care provider of an inpatient facility in which the principal is a patient.

It is encouraged that the original power of attorney for health care instrument be kept by the principal's physician. If the health care facility or health care provider receives the power of attorney for health care instrument, this fact must be noted in the medical record. If the principal is a patient of the health care provider, the power of attorney instrument or a copy must be included in the principal's medical record. An original copy of the instrument, legible photocopy or electronic facsimile copy is presumed to be valid.

When decisions may be made under a power of attorney for health care

The statute as written presumes that the decision-making powers of the power of attorney for health care cannot be exercised by the health care agent until the principal becomes incapable to make his or her own health care decisions. The law defines incapacity to mean the inability to receive and evaluate information effectively or to communicate decisions so that the individual lacks the capacity to manage his or her health care decisions. Incapacity may be found by two physicians, or one physician and one licensed psychologist, who personally examine the principal and sign a statement specifying that the principal has incapacity. A document other than the DOH (statutory) form may permit these decisionmaking powers to take effect under different circumstances. The principal's treatment desires supersede that of the power of attorney in all instances when the principal is capable of making those decisions.

Powers and limitations

The attorney in fact must act in good faith and consistent with the desires of the principal as either described in the power of attorney document or otherwise directed by the principal at any time. If the principal has not expressly stated his or her wishes, the health care agent must act in good faith and in the best interests of the principal. In this respect, the standard guiding the health care agent is that of "substituted judgment" when the wishes of the principal are known and "best interests" in all other circumstances.

In addition to limits that the principal may generally establish either in the document or through other communication, the law places several limits on the health care agent's authority to make certain health care decisions. The first series of limitations concern placement into certain health care and residential facilities. The health care agent may not consent to the admission of the principal as an inpatient to an institution for mental diseases (Wis. Stat. §49.43), an intermediate care facility for the mentally retarded (Wis. Stat. §46.278(1m)(a)), a state treatment facility (Wis. Stat. §51.01(15), or a mental health or drug or alcohol treatment facility (Wis. Stat. §51.01(9)). The principal may, how-

ever, be admitted to these facilities through the usual commitment procedures provided by state law (Wis. Stat. ch. 51 and 55).

The health care agent may consent to the admission of the principal to a nursing home for recuperative care for a period not longer than three months if the principal is admitted directly from a hospital inpatient unit unless the hospital admission is for psychiatric care. The law states that if the principal lives with his or her health care agent, he or she may be admitted by the health care agent into a nursing home or a community-based residential facility as a temporary placement for not longer than 30 days in order to provide the health care agent with a vacation or allow the health care agent to attend to a family emergency. If the power of attorney document so specifies, the health care agent may consent to the principal's placement in a nursing home or a community-based residential facility for reasons other than those listed above if the principal is not diagnosed as developmentally disabled or mentally ill at the time of the proposed admission.

It is important to note several further prohibitions and restrictions the law places on certain treatment decisions made on the principal's behalf. The health care agent may not consent to experimental mental health research or to psychosurgery, electroconvulsive treatment or other drastic mental health treatment procedures for the principal. As noted earlier, the health care agent may consent to the withholding or withdrawal of nonorally ingested nutrition or hydration for the principal if the document so authorizes. Nonorally ingested nutrition or hydration may not be withheld or withdrawn, however, if the principal's attending physician advises that in his or her professional judgment this will cause the principal pain or reduce his or her comfort. A final limitation is that the principal must state in the document that she wishes it to be effective if she is known to be pregnant.

Revocation

There are several methods for revoking the power of attorney described in the law. A principal may destroy the instrument itself or execute a signed and dated statement expressing his or her intention, by verbally revoke the power of attorney in the presence of two witnesses, or executing a subsequent power of attorney for health care instrument. Also, if the health care agent appointed in the instrument is the principal's spouse, and the marriage is subsequently ended through annulment or divorce, the power of attorney is revoked and the power of attorney instrument is invalid.

If the health care provider is notified that the power of attorney for health care is revoked, the time, date and place of the revocation and the time, date and place, if different, of the notice of revocation must be recorded in the principal's medical record.

A court may find an individual who has previously executed a power of attorney for health care instrument incompetent and appoint a guardian for the principal. Unless the court makes a finding that the power of attorney for health care instrument should remain in effect, the power of attorney is revoked. If a court makes this finding, the court-appointed guardian may not make health care decisions for the principal unless that guardian is also the health care agent named in the power of attorney instrument.

Duties and immunities of health care providers

The law immunizes health care providers and health care facilities from criminal prosecution, civil liability and charges of unprofessional conduct for actions that may arise from the medical care and treatment relationship between the health care provider, principal and the health care agent. The law states that in the absence of notice to the contrary, a health care provider may presume that a principal was authorized to execute his or her power of attorney for health care as outlined by the law and that the instrument is valid. Specific to physicians, the protection provided by the law extends to good faith actions in certifying incapacity and otherwise complying with the terms of a power of attorney instrument. A physician may refuse to comply with the decision of a health care agent if he or she makes a good faith attempt to transfer the principal to a physician who will comply. Also, a physician will not be held responsible for following the directives of a revoked power of attorney, unless the physician has actual knowledge of the revocation.

The issues that surrounded the passage of the power of attorney for health care have not been completely resolved. One continuing issue concerns the potential conflict between this legal instrument and a living will executed before 1991. As discussed later in this article, the living will law before 1991 contained one explicit limit that could contradict a grant of decisionmaking authority through a power of attorney for health care. This old living will form states that if the circumstances warrant its use (death is imminent and life-sustaining procedures would only artificially prolong the dying process), life-sustaining treatment may be withheld or withdrawn with only the continuation of nutritional support and fluid maintenance and alleviation of pain by medicine or other medical procedure. If a patient has executed a power of attorney for health care

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in addition to the pre-1991 living will and has expressly authorized the withholding of nutrition or hydration, the two documents could be in conflict. (In a technical sense, this conflict would only occur if both documents became effective--the principal is incapable of communicating his or her decisions, is in a terminal condition and death is imminent.) It is unclear whether this contradiction would limit the health care agent and the principal's health care providers, and many commentators argue that the living will should not be used because of this potential conflict. If a patient is still competent and has the old version of the living will and wishes to allow withdrawal or withholding of feeding tubes, he or she should be encouraged to execute a new living will.

Living wills

Wisconsin enacted the living will, also know as the "Natural Death Act" (or more recently, the "Declarations to Physicians Act") in October of 1984 and is found in Wisconsin Statutes chapter 154. Since its enactment, the living will has been amended several times, most recently in the 1995 legislative session. These recent amendments significantly change the living will and include revisions to the statutory living will form that are meant to shorten the form and to make the form easier to understand. Check to make sure you have and are using copies of the new statutory form. The recent amendments also require a health care facility or provider that receives a copy of a living will to include the copy in the declarant's medical record.

Living wills are declarations by competent adults directing their health care providers to withhold or withdraw life-sustaining treatment if they are certified to be in a terminal condition and are unable to communicate their health care wishes. The law allows the declarant to include persistent vegetative state as a condition triggering the living will's implementation and allows withholding or withdrawing feeding tubes as long as the attending physician makes certain findings. At this point, the only disabling mental condition for which the living will does not apply is if the declarant is in a coma, and death is not imminent.

When does a living will become effective?

A living will may be used to direct care after two physicians, one of whom is the patient's attending physician, personally examine the patient and certify that the patient has a terminal condition or, if indicated in the document, the patient is in a persistent vegetative state. "Terminal condition" is defined as an incurable condition caused by injury or illness that reasonable medical judgment finds would cause death imminently, so that the application of life-sustaining procedures serves only to postpone the moment of death. "Persistent vegetative state" is defined by statute as a condition that reasonable medical judgment finds constitutes complete and irreversible loss of all of the functions of the cerebral cortex and results in a complete, chronic and irreversible cessation of all cognitive functioning and consciousness and a compelte lack of behavioral responses that indicate cognitive functioning, although autonomic functions continue.

The statutory living will form contains a check-off box for the declarant to indicate whether they wish the directive to apply if they are in a persistent vegetative state. Other forms may include this triggering condition in the wording of the form itself.

Under the recent amendments, a valid living will from another state or jurisdiction is considered valid and enforceable in Wisconsin to the extent that the living will is consistent with Wisconsin law. This amendment is a welcomed clarification of the ambiguity that existed for people who executed out-of-state living wills.

Limits

The pre-1991 law restricted the living will so that physicians were not authorize to withhold or withdraw nutrition and hydration. This restriction created the conflict with the power of attorney for health care if the principal allowed this treatment decision *if both documents were triggered* (the patient was incapacitated, in a terminal condition, and death was immiment). In the new law, living wills may include the direction to withhold or withdraw "medical feeding tubes," unless the attending physician advises that in his or her professional opinion this will cause the person pain or reduce the person's comfort and the pain or discomfort cannot be alleviated through pain relief measures. This change should help resolve the conflict noted earlier.

The living will is ineffective if the person is pregnant and the physician knows of this diagnosis.

For documents executed before December 1, 1991, only the original living will document is a valid instrument. For documents executed after that date, copies are acceptable by law.

Revoking a living will

The method for revoking a living will is identical to revoking a power of attorney for health care: (1) defacing or tearing up the document; (2) executing a written revocation; (3) verbally expressing the intent to revoke; or (4) executing a subsequent living will. A verbal revocation is effective only if the declarant or a person acting on his or her behalf notifies the declarant's attending physician that the document has been revoked.

Immunities

Physicians, inpatient health care

facilities and health care providers acting under the direction of a physician are provided with immunity from criminal or civil liability or charges of unprofessional conduct under certain circumstances. This immunity extends to participating in the withholding or withdrawal of life-sustaining procedures and, under a newer living will document, withholding or withdrawing feeding tubes. Health care providers are also immune if acting under a revoked living will, unless they have actual notice of the revocation. Health care providers other than physicians are immune from failing to comply with a living will. Physicians, however, may be charged with unprofessional conduct for failing to abide by a living will unless the physician makes a good faith attempt to transfer the patient to another physician who will comply with the patient's living will document.

Unlike the immunity given by the power of attorney for health care, physicians who certify the patient's terminal condition or persistent vegetative state are not given immunity for performing this certification in good faith. This omission may not be intentional and could be rectified in future living will law amendments.

Witnesses are given immunity for acting in good, unless they are prohibited by law from witnessing the living will document.

Additional comments

An aspect concerning the implementation of both living wills and powers of attorney for health care is that certain health care workers are not able to honor the wishes stated on the documents. Emergency medical technicians and paramedics are directed by their own guidelines to provide cardiopulmonary resuscitation and other emergency care to patients regardless of living wills and other documents stating a patient's wish to have this treatment withheld. In addition, EMTs and paramedics are not defined as health care providers and therefore are not provided immunity under state law for following the directives of these documents or health care agents appointed therein. A patient who has executed these advance directives and the patient's family should be advised that particularly with patients suffering terminal medical conditions an ambulance service should not be called if CPR and other life prolonging measures are not desired in that instance.

Forms for powers of attorney for health care and living wills may be obtained by writing the Wisconsin Division of Health, P.O. Box 309, Madison, Wisconsin 53701. Or you may contact Sherry Kasper-Mohrbacher at (608) 266-8475. **If you need additional information, contact Kalisa Barratt, JD, at SMS extension 233 or via e-mail at: KalisaB@smswi.org.**

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Nominees for SMS Offices: 1997-1998

Candidate for President-Elect -- 1997-1998

John D. Riesch, MD

John D. Riesch, MD, is a general surgeon with the Medical Associates Health Centers in Menomonee Falls. He received his medical degree from the University of Wisconsin Medical School in 1958; completed an internship with the Milwaukee County General Hospital; and a general surgery residency there in 1963. He served in the US Army from 1952-1954 and in 1965 was appointed Assistant Clinical Professor, Department of Surgery, with the Medical College of Wisconsin, a post he still holds. He is Board certified in surgery and is a Fellow with the American College of Surgeons.

Doctor Riesch's memberships include: the AMA, the Waukesha County Medical Society (President 1973-1974); Wisconsin Chapter, American College of Surgeons; Wisconsin Surgical Society, Chairman Ethics Committee; Medical Society of Milwaukee County; and Waukesha Cancer Society (President 1969-1970).

He has been a member of the SMS since 1963 and has held the following posts: member, Nominating Committee, 1976-1994; member, Commission on Peer Review, 1975-1984; Delegate, House of Delegates 1967-present. He served as an AMA Alternate Delegate from 1979-1988 and a Delegate from 1988-1996. In order to run for the office of President-Elect, Dr Riesch agreed to not seek another term as AMA Delegate, for which he is eligible.

In letters nominating Dr Riesch for President-Elect, his vision, service and commitment to the community were cited. He has been recognized by the YMCA and Chamber of Commerce for his dedicated work and has been active in promoting public health policy through the legislative process.

Candidate for Treasurer

Jack M. Lockhart, MD

Jack M. Lockhart, MD, of La Crosse, is Board certified in internal medicine and rheumatology. Dr Lockhart graduated from Harvard Medical School and served an internship at University Hospitals of Cleveland, Cleveland, Ohio. He completed fellowships at the University of Minnesota Medical School in Minneapolis where he was an instructor from 1976-1977, and has been a clinical lecturer with the University of Iowa since 1982.

Dr Lockhart served as a delegate to the SMS and has been on the Board of Directors since 1989, serving on the Finance Committee since that time, and was a member of the Nominating Committee from 1986-1990. He has served as a member of WISPAC's Board of Directors since 1990, and was a member of the Physicians Alliance Commission for nine years. In addition, he has held numerous leadership positions with Gundersen Clinic/Lutheran Hospital, La Crosse where he is Chair of the Department of Internal Medicine (1993-present). Dr Lockhart served as the President of the La Crosse County Medical Society (1993-1994).

Candidate for Speaker of the House 1997-1999

Michael C. Reineck, MD

Michael C. Reineck, MD, of West Bend, is an orthopedic surgeon practicing with Orthopaedic Associates of West Bend, S.C. He received his medical degree at the University of Wisconsin Medical School in 1970; completed an internship with Milwaukee County General Hospital in 1971, and a residency with St. Mary's Hospital, in affiliation with the Medical School of the University of Michigan, in 1975. He became Board certified with the American Academy of Orthopaedic Surgeons in 1976 and a Fellow American Academy of Orthopaedic Surgeons in 1979.

Dr Reineck's medical memberships include: American Academy of Orthopaedic Surgeons (member, several committees), AMA, Mid-America Orthopaedic Association, Milwaukee Orthopaedic Association, Washington County Medical Society (Past President), and the Wisconsin Orthopaedic Society (Past President).

Dr Reineck joined the State Medical Society in 1975 and is Past Chair of the Governmental Affairs Commission and was a member of the Professional Liability Committee. He was Vice Speaker of the SMS from 1994 -1996 and Speaker from 1996-1997. He has made numerous contributions to SMS and AAOS meetings and has participated as a lecturer and developed course materials for the AAOS.

Candidates for Delegates to the AMA -- 1998-1999

Robert F. Purtell, Jr., MD

Robert F. Purtell, Jr., MD, is a family practitioner in Milwaukee. He received his medical degree from Marquette University in 1961; completed a general internship at Misericordia Hospital, Milwaukee; and a general surgery residency at St. Joseph's Hospital in Milwaukee. He is Board certified in family practice, and holds an Assistant Clinical Professorship in the Department of Family Medicine at the Medical College of Wisconsin.

His memberships include: American Academy of Family Physicians (AAFP), 1962-present; Medical Society of Milwaukee County, 1962-present; American Medical Association, 1962-present; Wisconsin Academy of Family Physicians, 1962-present (President 1979-1980); and Foundation for Medical Care Evaluation, Southeastern Wisconsin, 1974-1978. He has held numerous leadership positions with these organizations.

Dr Purtell joined the SMS in 1962. He currently serves as a member of the Executive Committee of the Board of Directors and he was a member of the Nominating Committee from 1984 to 1994, which he chaired from 1989-1990. He was chair of the SMS Federal Legislative Policy Committee from 1977-1985, chair of the Physicians Alliance Commission from 1985-1989 and a member of the Commission on Governmental Affairs from 1978-1985. He currently serves as an SMS alternate delegate to the AMA.

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Susan L. Turney, MD

Susan L. Turney, MD, is an internist and Medical Director of Reimbursement with Marshfield Clinic. She graduated from the University of Wisconsin Medical School in 1979 and completed an Internal Medicine residency at Marshfield Clinic/St. Joseph's Hospital in 1982. Dr Turney has been on the Board of Directors of Marshfield Clinic since 1984 and has held numerous leadership positions with Marshfield Clinic and St. Joseph's Hospital.

Among the many societies and associations Dr Turney belongs to, she has held many official posts with the AMA (1982-present), the American Society of Internal Medicine (1979-present); the Wisconsin Society of Internal Medicine (1981-present); American Medical Group Practice Association (1982-present); the Wood County Medical Society (1979-present); and the SMS, which she joined in 1979.

She has been an SMS delegate to the AMA since June 1996 and was an alternate delegate from April 1993 to June 1995. Dr Turney is a member of the SMS Health Care Financing and Delivery Commission, and the Managed Care Sub-Committee (Chair); Medicare Carrier's Advisory Committee (Co-Chair 1992-present); Governmental Affairs Commission (1984-present). She was a Delegate, Specialty Sections from 1988-1992; Young Physicians Section President-Elect 1992; and belonged to several Reference Committees and the Task Force on Physician Manpower (1989-1990). Dr Turney is also active in the Marshfield community and lends her expertise to several organizations including the United Way, the Marshfield Medical Center Credit Union and the Badger State Games.

Kenneth M. Viste, Jr., MD

Kenneth M. Viste, Jr., MD, of Oshkosh, served as President of the SMS from 1987-1988, and has held numerous leadership positions with the SMS since joining in 1970. He has been an SMS delegate to the AMA since 1993 and, as he writes to the Nominating Committee, he hopes to continue as "...it is indeed an honor to represent and serve the physicians of Wisconsin in this capacity...."

Dr Viste graduated from Northwestern Medical School and specializes in neurology. He is currently on the faculty at the University of Wisconsin Medical School and the Winnebago Mental Health Institute, and serves as Medical Director, Physical Rehabilitation Unit, Mercy Medical Center. He also serves as the President of the American Academy of Neurology and is active in the AMA and other professional societies. He is currently Chair of the SMS Wisconsin Physicians Political Action Committee and the SMS Foundation, and has also served as Chair of the Long Range Planning Commission, the Physicians Alliance Commission, the SMS Health Care Reform Committee, and the Partner Care Working group.

Candidates for AMA Alternate Delegate -- 1998-1999

Kevin T. Flaherty, MD

Kevin T. Flaherty, MD received his medical degree from Loyola University in Chicago. He completed his internship at Sacred Heart Medical Center in Spokane, Wash, and his ophthalmology residency at Loyola University. He is Board certified and is a Fellow of the American Academy of Ophthalmology and the American College of Surgeons. Dr Flaherty is the Medical Director for North Central Health Protection Plan, a cooperative health plan of Wausau Insurance.

Dr Flaherty was elected as an Alternate Delegate to the Wisconsin delegation of the AMA in 1994. He served as President of the Marathon County Medical Society (1994-1996), and he has served on the Marathon County Medical Society Executive Committee since 1992; previously, he served as the Marathon County Medical Society delegate to the SMS House of Delegates. He has chaired reference committees for the Young Physicians Section of the AMA and SMS, and he has served on the SMS Task Force on Quality Assessment and Practice Parameters since 1991 (now the Medical Outcomes Research Project). Additionally, he remains active in other professional societies and sits on the American Academy of Ophthalmology Committee on Relations with Organized Medicine (since 1993). Dr Flaherty hopes to continue his work at the AMA as an Alternate Delegate, bringing issues of importance to Wisconsin physicians to the national level.

Robert J. Jaeger, MD

Robert J. Jaeger, MD, was first elected as an AMA Alternate Delegate from Wisconsin in 1995. He has served on the SMS Board of Directors since 1988, and is a member of the SMS Maternal and Child Health Commission, Maternal Mortality Study Committee, the SMS Nominating Committee, and Chairman of the District IV Caucus.

Dr Jaeger, a specialist in obstetrics and gynecology, is a graduate of the University of Wisconsin Medical School and served an internship and residency at Milwaukee County General Hospital. Dr Jaeger is an assistant clinical professor at the Medical College of Wisconsin, Department of Obstetrics and Gynecology. He has served as a member on the Board of Directors of the Family Planning Health Services, Inc. Dr Jaeger was also Director of the Rice Clinic Board of Directors from 1985-1989, and serves on the Compensation Committee. He is active in numerous professional societies, including the AMA, the Wisconsin Society of Obstetricians and Gynecologists, Portage County Medical Society, and serves in various leadership roles at St. Michael's Hospital.

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Richard G. Roberts, MD, JD

Richard G. Roberts, MD, JD, a Board certified family practitioner, is with the Department of Family Medicine and is a professor at the University of Wisconsin and was Acting Chair of the Department of Family Medicine from 1992-1993.

Dr Roberts, a member of SMS since 1983, served as President from 1994-1995 and has served on the Board of Directors since 1987. He was speaker of the SMS House of Delegates from 1987 to 1993. He currently serves an alternate delegate to the AMA. He is Vice Speaker of the American Academy of Family Physicians and has served on numerous AAFP committees. Dr Roberts is past president of the Wisconsin Academy of Family Physicians. He is a Director for the Wisconsin Institute of Family Medicine, UW Medical Foundation, and Physicians Insurance Company of Wisconsin. He is a past member of the Joint Commission on the Accreditation of Health Care Organizations task force on clinical indicators and obstetrics; and currently serves on the Health Care Quality Improvement Initiative Steering Committee for the Wisconsin Peer Review Organization.

Dr Roberts served recently on the Legislative Special Council on School Health Services and the Governor's Task Force on Academic Medical Center Costs. Nationally, Dr Roberts is a member of numerous professional societies and holds many leadership positions within the medical profession and the community.

John E. Ridley, III, MD

Nominated to fill unexpired term as Alternate Delegate for 1997 and 1998.

John E. Ridley, III, MD, is an ophthalmologist in private practice in Milwaukee. He graduated from Indiana University Medical School and served a rotating internship at Detroit Receiving Hospital and an ophthalmology residency at the Marquette School of Medicine. He is an Assistant Clinical Instructor in Ophthalmology at the Medical College of Wisconsin. He is a Diplomate of the American Board of Ophthalmology.

Dr Ridley served on the SMS Board of Directors from 1990-1996, and was a District 1 Delegate to the House of Delegates from 1970-1971 and 1988-1996. He is active in the Medical Society of Milwaukee County, where he has been on the Board of Directors since 1991, and serves as Chair of the Mediation Committee. Additionally, Dr Ridley belongs to numerous professional societies, such as the Milwaukee Ophthalmological Society (President 1983) and community organizations including Prevent Blindness America and Prevent Blindness Wisconsin (Board of Directors).

Raymond C. Zastrow, MD

Nominated to fill Dr Purtell's unexpired term as an Alternate Delegate for calendar year 1998 if Dr Purtell is elected as a Delegate.

Raymond C. Zastrow, MD, Chair of the SMS Board of Directors 1996-1997, is a clinical pathologist with the Department of Pathology, St. Michael's Hospital, Milwaukee. He has been active with the SMS for many years, holding such positions as: member, Board of Directors 1987-present; member WISPAC Board of Directors; member, Physicians Alliance Commission; SMS Bylaws Committee (Chair); SMS Finance Committee; and Alternate Delegate to the AMA from 1983-1984. Dr Zastrow has served on the AMA Ad Hoc committee on Health Policy Agenda for the American People, and is active in numerous professional societies including, the Medical Society of Milwaukee County, and the College of American Pathologists (President).

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CANCER CONFERENCE

The 29th Annual Southeastern Wisconsin Cancer Conference will be held on **Saturday, April 5, 1997**. The title of this year's conference is: "Malignant Lymphoma -- New Insights and Challenges."

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Following the speaker presentations, case scenarios and a panel discussion will take place. Participants will have the opportunity to ask questions at that time.

This annual conference is supported by the hospitals of Southeastern Wisconsin, the American Cancer Society and is organized by committee of volunteer physicians. The symposium is open to all health care professionals free of charge; however tax deductible contributions to the Southeastern Wisconsin Cancer Conference are greatly appreciated.

Registration begins at 7:30 a.m., with the conference beginning at 8:00 a.m. and lasting until noon. Pre-register by calling the American Cancer Society Southeast District office at **(414) 453-4500** for more information.

Notice to SMS Members of Proposed Constitutional Amendment

THIS NOTICE IS given to SMS members, pursuant to Article XIII of the SMS Constitution, of the following proposed constitutional amendment introduced at the 1996 SMS Annual Meeting of the House of Delegates. This amendment may be taken up as old business at the second session of the 1997 SMS Annual Meeting of the House of Delegates.

Article VI, Board of Directors, be amended to read:

The Board of Directors, hereinafter referred to as "Board," shall have full authority and power of the House of Delegates between sessions of the House. It shall consist of the resident physician and district directors, immediate past president, president, president-elect, treasurer, speaker and vice speaker of the House of Delegates. The executive vice president shall be an ex officio member of the Board, but without the right to vote. A majority of its voting members shall constitute a quorum. One resident physician director shall be elected by the members of the resident physician section of the Society. District ~~D~~directors shall be elected from eight geographic districts whose boundaries shall be determined by the House of Delegates. There shall be elected one director from each district. In addition, there shall be elected director(s) from each district based on a formula using the number of members in each district as the numerator and the total membership of the Society as the denominator, rounded to the nearest whole number. This calculation shall be made every third year, and, as nearly as possible, is to provide for no more than 31 district directors and shall be based on the year end membership totals. The number of directors established for each district shall be approved by the Board and shall be reported to the districts by the executive vice president before annual elections to the Board. As nearly as possible, one-third of the district director members of the Board shall be elected each year. Each district director shall be nominated and elected only by the elected delegates of the county medical society or societies from the district in which the director's principal place of practice is located. ~~Such~~District and resident physician director elections shall be subject to the approval and confirmation of the House of Delegates. The terms of the district directors shall be for three years. The term of the resident physician director shall be for one year. No individual shall be permitted to serve more than three consecutive three-year terms as a district director or four consecutive one-year terms as the resident physician director, and no more than a total of six terms of service as a district director or a combined total of seven terms of service as the resident physician director and a district director shall be permitted.

Chapter V, Board of Directors, Sec 4. be amended to read:

Sec 4. Each district director shall be the organizer and mediator for the district. District ~~D~~directors shall visit each county in their district as needed for the purpose of organizing component societies where none exist, for inquiring into the condition of the profession, and to keep informed of the activities of the component societies in the district. Each district director shall arrange for an annual conference or caucus with the societies or their delegates within the district, at which time information shall be disseminated concerning the activities of the State Medical Society and component societies within the district. Each district director and the resident physician director shall report as necessary to the Board. The necessary traveling expenses incurred by each director in the line of duties herein imposed may be allowed on a proper itemized statement, but this shall not be construed to include the expense of attending the annual meeting of the Society.

Chapter V, Board of Directors, Sec 10. be amended to read:

Sec 10. The Board may, by interim appointment, fill any vacancy in office not otherwise provided for which may occur during the interval between annual meetings of the House of Delegates, except a vacancy in the remainder of the term of the resident physician director shall be filled only by appointment by the chair of the resident physician section of the Society. The appointee shall serve until a successor has been elected and has qualified. When a district initially qualified for an additional director, such position shall be considered new and not a vacancy to which the Board is authorized to make an interim appointment. Such new position shall be filled by election at the next

meeting of the House of Delegates in the manner provided by Article VI of the Constitution. The initial term shall be so established as to maintain the election of substantially one-third of the district directors each year.

Chapter XI, Specialty sections, a new Sec 7. be added to read:

Sec 7. The resident physician section shall be entitled to elect one section member, for a term of one year not to exceed four terms, as the resident physician director to the Board of Directors.

Chapter XI, Specialty sections, Sec 7. be renumbered to read:

Sec ~~7~~8. The specialty sections of the Society shall be considered an integral part of the working committee structure of the Society as outlined in Chapter VI of these Bylaws. ❖

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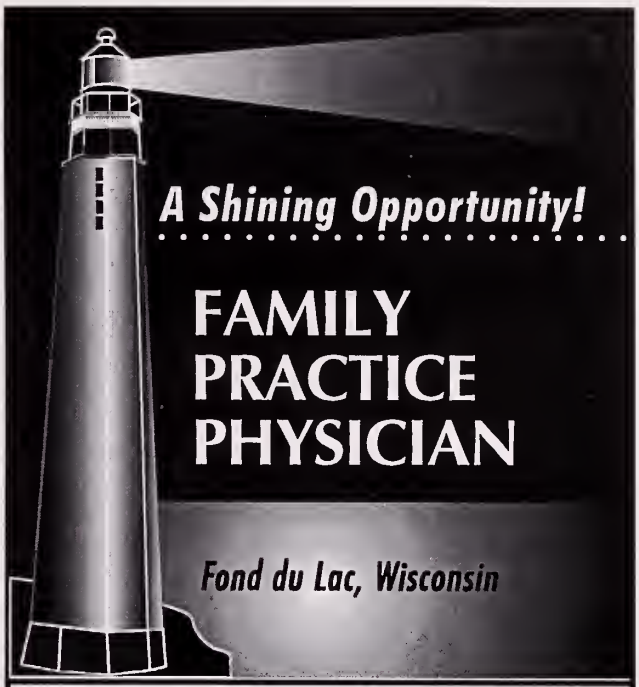

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Michael J. Dolan, CLU, ChFC

The financial burden of a life-threatening illness may be as devastating as the illness itself. But many life insurance companies now offer a way to meet the costs. They do so through accelerated or "living" benefits, life insurance proceeds paid to the policyholder while he or she is alive and can use the money to pay bills and make life more comfortable.

These benefits may be provided in the policies themselves, or they may be in riders added to new or existing policies. They are usually found in individual whole life policies but may also be in some term insurance policies and group life policies.

Typically they provide that all or some portion of the policy proceeds are paid to the policyholder in certain specific circumstances: the diagnosis of a terminal illness expected to result in death within six months to a year; the need for an extraordinary medical procedure such as an organ transplant; or permanent residence in a nursing home. Each policy or rider spells out the circumstances in which benefits apply. Payment may be made in monthly installment or in lump sums; sometimes the policyholder can choose.

Here are some other factors to consider:

- Some insurers add a small additional premium to the basic cost, to pay for accelerated benefits. Others do not charge anything extra at the outset, but reduce benefits to compensate for their lost revenue if benefits are paid early. Some also impose a nominal service charge.
- Since life insurance is generally bought to protect a spouse and dependent children from financial loss suffered by a breadwinner's death, it's important to realize that using accelerated benefits reduced and may even eliminate the amount that will be paid out at death.
- The tax status of accelerated benefits is not clear. Although proceeds paid to life insurance beneficiaries at the death of an insured are generally exempt from federal income tax, an IRS proposal that accelerated benefits be given the same tax treatment has not yet been enacted.

Accelerated benefits through life insurance are not a substitute for health insurance, disability income insurance, or long-term care insurance, but they can be enormously helpful in a time of need. More than 150 insurance companies now offer these benefits. To find out if your insurer is among them, ask your life insurance agent.

Although all 50 states and the District of Columbia have approved some form of accelerated benefit provisions, and the National Association of Insurance Commissioners has developed model regulations for the sale of these policies, every policy is not available in every state. Again, your life insurance agent can provide the information you need. ❖

Michael J. Dolan, CLU, ChFC

Dolan is president and chief operating officer of SMS Insurance Services and a member of the National Association of Life Underwriters.

Obituaries

Seno, Elvira, MD, 87, a psychiatrist from Wheatland township, died October 31, 1996. Dr Seno graduated from Burlington High School in 1926; she received a bachelor's degree in zoology and bacteriology, and a master's degree in bacteriology in 1940. Dr Seno earned her medical degree in 1943 from University of Wisconsin, Madison. She completed her residency in psychiatry at the VA Hospital, Northwestern Medical School in 1958. Dr Seno served in the United States Army Medical Corps in World War II and the Korean conflict. She retired as a staff psychiatrist in 1973 from the VA Hospital, Wood, Wis. Dr Seno was a member of the American Medical Association, the State Medical Society of Wisconsin, Waukesha County Medical Society, American Trudeau Society, and American College of Chest Physicians. She is survived by two sisters, Idella Seno Johnson, of Lake Geneva and Myrtle M. Seno, of Knoxville, Tenn; a brother, Dr Leslie Seno, of Beloit; and a sister-in-law, Marion Seno, of Madison.

Malloy, Thomas G., MD, 74, a surgeon from Elm Grove, died November 14, 1996. Dr Malloy earned his medical degree from Marquette University Medical School. He completed his internship at St. Mary's Hospital, Milwaukee, in 1946 and his residency at the VA Hospital in Wood, Wis and Little Rock, Ark in 1952. He was a member of the State Medical Society of Wisconsin and the Medical Society of Milwaukee County. Dr Malloy is survived by his wife, Fehr; 11 children, Tom, Molly Berens, Pete, John, Joe, Jim, Matt, Nora Mihm, Mark, Steve, and Dennis; and 15 grandchildren.

Swingle, John D., MD, 65, a radiologist from La Crosse, died November 23, 1996. Dr Swingle earned his medical degree from the University of Wisconsin, Madison in 1956. He completed his internship at Montreal General Hospital in 1957, served as a staff physician at the Mendota State Hospital, and as a General Medical Officer (Captain) in the US Army. Dr Swingle completed his radiological residency in Madison in 1965. He was a general practitioner in Port Washington from 1960 to 1961. From 1965-1971, he served on the faculty at the University of Wisconsin, Madison, in the Radiological Department. He became a clinical professor of Radiology with that institution. Dr Swingle was Chairman of the Department of Radiology at Gundersen Clinic, La Crosse, from 1972 to 1980 and was a member of the Gundersen Clinic Board of Directors from 1974 to 1980. From 1980 until 1992 he was a Consultant Radiologist at Reedsburg Hospital, Reedsburg, and he was at the Wisconsin Dells Clinic until his retirement in 1993. He is survived by his wife, Carolyn; two children, Mark of La Crosse, and Jennifer of Onalaska. ❖

Tributes to loved ones can help others

The memorial program of the SMS Foundation offers physicians a unique opportunity to provide a living memorial to a loved one or friend through a gift to the Foundation. A memorial contribution can provide financial aid to a needy medical student, help stimulate research on behalf of the public health or aid in the preservation of Wisconsin's medical history. When a memorial gift is made to the Foundation, the deceased person's family receives a special card with the name of the donor. For more information, contact the Foundation staff at the SMS.❖

County Society News

Dane. The following physicians were approved for membership in the Dane County Medical Society: Lynda Alvarado; Jessie DeGroat, Jr.; and Michael J. Schiferl.

Douglas. The Douglas County Medical Society approved membership for Clinton T. Moen, MD.

La Crosse. The following physicians were approved for membership in the La Crosse County Medical Society: Dana Christiansen; Kevin Fitzgerald; Clark Hanmer; Jon Heiderscheit; Kevin Klein; Daniel Lenselink; John Merfeld; Basem Ratrout; and Rachel Schaer.

Marathon. The Marathon County Medical Society approved membership for Jimmy B. Madagme, MD.

Outagamie. The Outagamie County Medical Society approved membership for J. David Kuplic, MD and Sunil K. Gupta, MD.

Price. The Price County Medical Society approved membership for Laura M. Nelson, MD. ❖

Physician Briefs

David Bluestein, MD, an urologist, joined the medical staff of Memorial Hospital, Medford. Dr Bluestein earned his medical degree from the University of California, Los Angeles. He completed his residency in urology at Mayo Graduate School of Medicine, Rochester, Minn. Dr Bluestein has specialized training in prostate cancer, radical cancer surgery, male infertility, microvascular surgery and laser surgery.

Bert Callahan, MD, an orthopedic surgeon, joined Drs Steve Pals and Robert Coe at the Beaver Dam Orthopaedic Clinic. Dr Callahan earned his medical degree from St Louis University School of Medicine in 1987. He completed an internship and residency at the Fitzsimons Army Medical Center in Aurora, Colo.

Marguerite Compton, MD, was honored for her published research on the topic of "Rhabdomyolysis Associated with Azathioprine Hypersensitivity Syndrome." Dr Compton's article appeared in the *Archives of Dermatology*.

Judy L. Fruehbrodt, MD, a family practitioner, joined the medical staff of Franciscan Skemp Healthcare Holmen Clinic. She earned her medical degree from the University of Minnesota and completed her residency in family practice at the Franciscan Skemp Healthcare, Mayo Health System, Family Practice Residency.

Jeff Gaver, MD, an internist, recently joined the medical staff of Internal Medicine Clinic of Memorial Hospital at Oconomowoc. Dr Gaver earned his medical degree from the University of Wisconsin Medical school, graduating with honors in 1987. He completed an internship in internal medicine at Mt. Sinai Medical Center and a three year residency in emergency medicine at the Milwaukee Regional Medical Center. Dr. Gaver also completed a residency in internal medicine at Sinai-Samaritan Medical Center in Milwaukee. He serves as a Flight for Life physician at the Milwaukee County Regional Medical Center and a Med Flight physician for the University of Wisconsin Hospitals and Clinics in Madison.

Clark B. Hanmer, MD, a family practitioner, joined Gundersen Lutheran, La Crosse and serves as chair of the Family Practice Department. He earned his medical degree from Wayne State University, Detroit, Mich, in 1977. Dr Hanmer completed his internship at Gundersen Medical Foundation/ Lutheran Hospital, La Crosse in 1978 and a family practice residency at Duke, Fayetteville Area Health Education Center, Fayetteville, NC, in 1980. He completed a fellowship in family medicine education and administration at Ohio State University, Columbus, in 1988. Dr Hanmer is board certified in family practice.

James Ketterhagen, MD, a general and vascular surgeon, was appointed senior medical director at PrimeCare, Wauwatosa. Dr Ketterhagen has practiced surgery for 13 years and has been an associate medical director with PrimeCare for four years.

E. Lawrence Markey, MD, an orthopedic surgeon, joined the medical staff of Wausau Hospital. Dr Markey earned his medical degree from Wayne State University in Detroit. He completed his orthopedic residency at the University of Wisconsin, Madison. He joined the US Air Force and served as Chief of Orthopedics at Interlik Air Force Base in Turkey and at David Grant Medical Center in Fairfield, Calif. Dr Markey has additional interests in arthroscopy of the shoulder, hip and knee.

Richard G. Roberts, MD, JD, a family physician and professor at the University of Wisconsin Medical School, was elected speaker of the Congress of Delegates of the American Academy of Family Physicians (AAFP). Dr Roberts was elected speaker by the AAFP's governing body, the Congress of Delegates, which met last October. Dr Roberts graduated from George Washington University School of Medicine, Washington, D.C., in 1980, earned in law degree from the University of Wisconsin Law School in 1977. He is a board certified family physician, a diplomate of the American Board of Family Practice, and a Fellow of AAFP, an earned degree awarded to physicians who complete 600 hours of approved postgraduate study and who have been members of the AAFP for at least six years.

William R. Scorby, MD, a specialist in occupational health and preventive medicine, recently joined the medical staff of Gundersen Lutheran, La Crosse. Dr Scorby earned his medical degree from the Medical School in Chicago in 1987. He completed an internship at Portsmouth Naval Hospital, Portsmouth, Va in 1988 and a residency in environmental and occupational medicine in 1994 at the University of Pittsburgh's Graduate School of Public Health, Division of Environmental and Occupational Medicine, Pittsburgh. Dr Scorby is board certified in occupational health and preventive medicine. ❖

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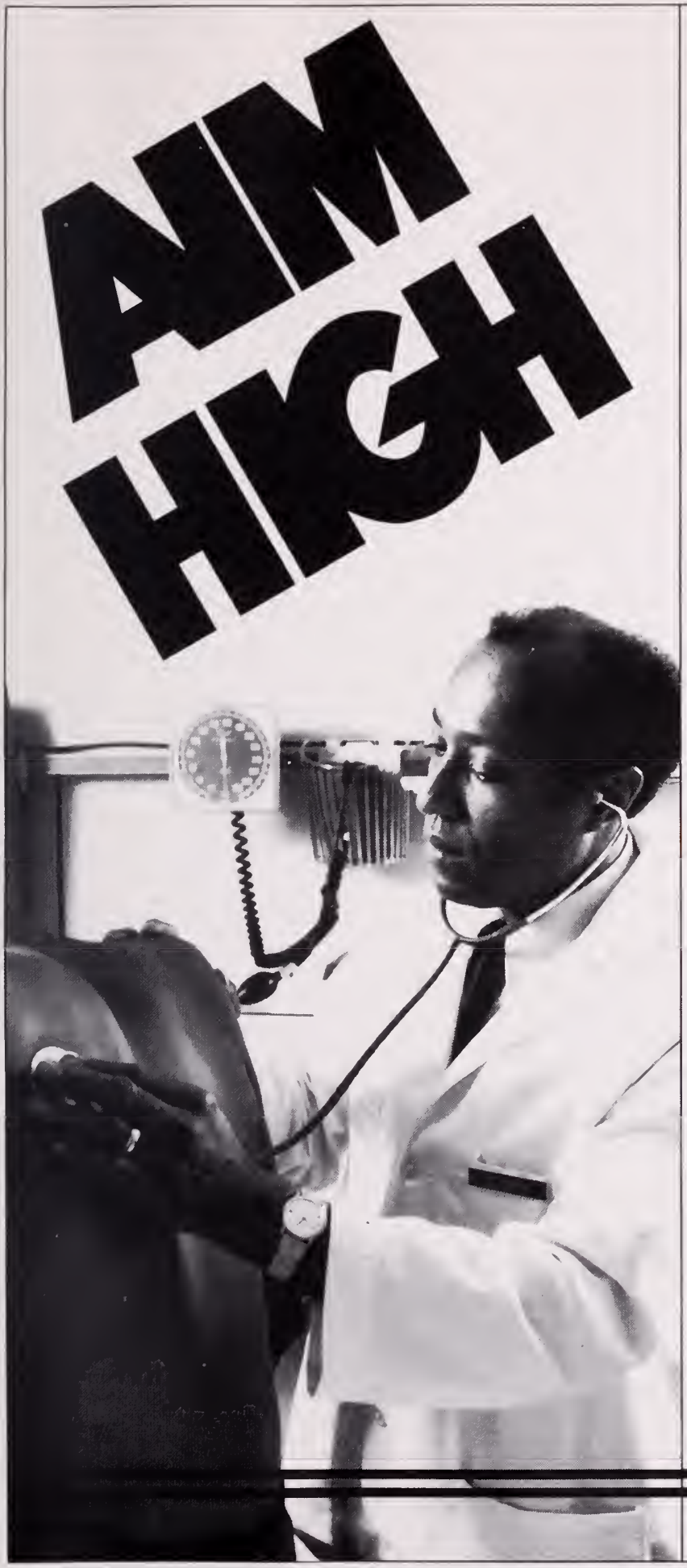

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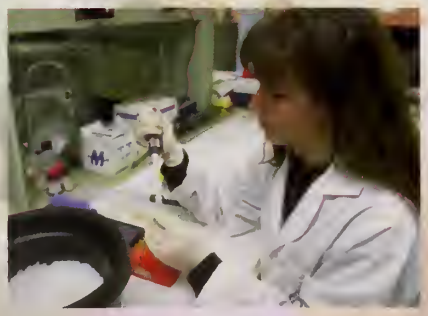

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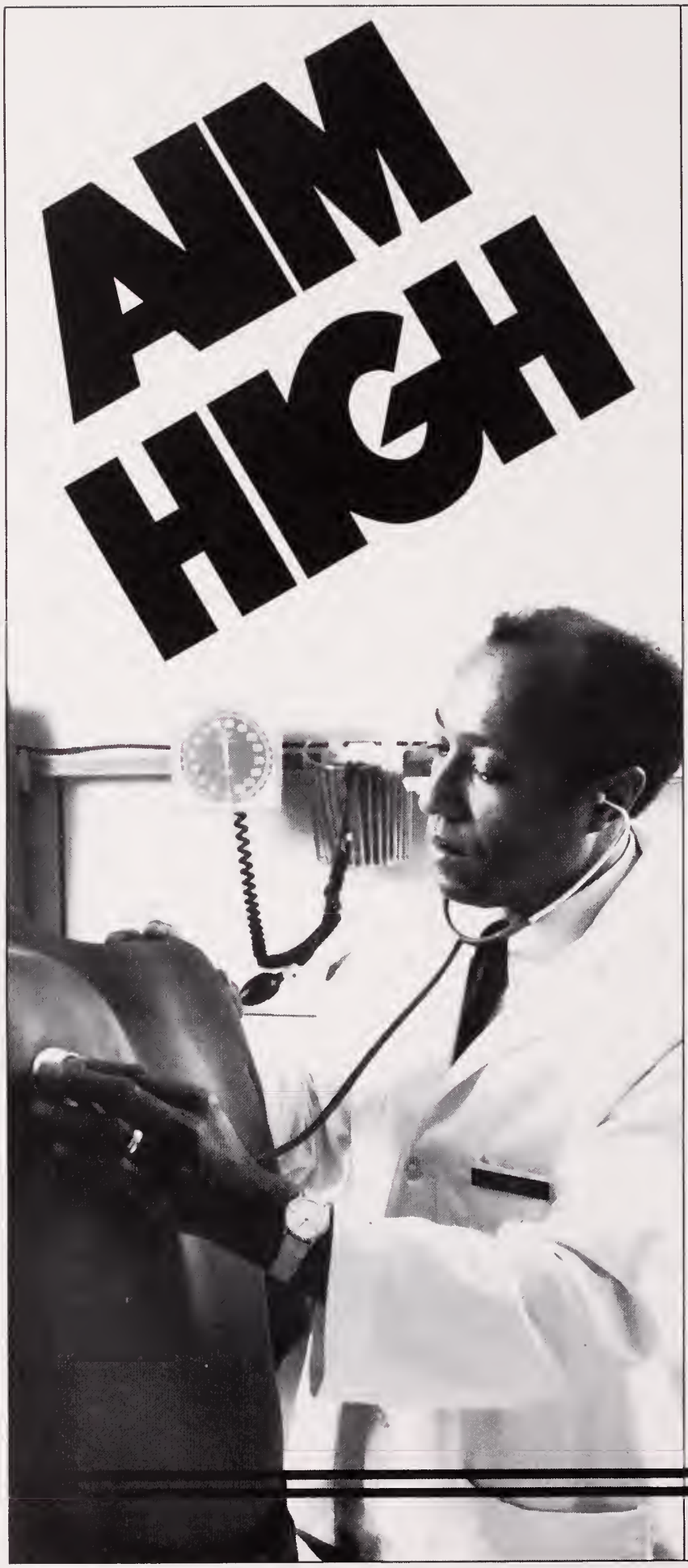

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Wisconsin Medical Journal

The *Wisconsin Medical Journal* (ISSN 0043-6542) is the official publication of the State Medical Society of Wisconsin and is devoted to the interests of the medical profession and health care in Wisconsin. The communications director and managing editor are responsible for overseeing the production, business operation and contents of the Journal. The editorial board, chaired by the medical editor, solicits and peer reviews all scientific articles; it does not screen public health, socioeconomic or organizational articles. Although letters to the editor are reviewed by the medical editor, all signed expressions of opinion belong to the author(s) for which neither the *WMJ* nor the SMS take responsibility. The *WMJ* is indexed in Index Medicus, Hospital Literature Index and Cambridge Scientific Abstracts.

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Created by the Territorial Legislature in 1841 and now representing nearly 8,500 member physicians, the Society's purpose is to "advance the science and art of medicine and the health of the people of Wisconsin; ensure that physicians are equipped to deal effectively with the economic and political aspects of practice; and serve as the patient and physician advocate to government and other relevant publics." The major activities of the Society concern medical education, peer review, legislation, community health education, scientific affairs, socioeconomics, health planning, service to physicians, operation of the Charitable, Educational and Scientific Foundation, and publication of the *Wisconsin Medical Journal*.

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Our Cover: Alternative medicine is a modern term that applies to many proven ancient modalities as well as newer, sometimes unproven and even harmful techniques used to treat illness.

Our cover emphasizes the way this field has come full circle: once the practice of ancient healing arts, today merged with new technologies to help millions of Americans find relief beyond what traditional medicine is able to provide.

Cover photography includes: A collection from the SMS Foundation of early 20th century pharmaceuticals, and turn-of-the-century bottles filled with solutions used by Thomas Edison in his Sarasota, FL laboratory (Cover design and photo: Eric Landmann).

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President's Page
Reflections on the Issues Discussed During My Presidency

As my presidential term draws near its end, it seems appropriate to look back over the events of the past year since I was installed as President of the SMS in April 1996, and evaluate what, if any, progress has been made on the four issues that I enumerated on my initial President's page in May 1996.

The first of these was **physician-assisted suicide and the related issues of medical care and medical decisions at the end of life.**

The issue of euthanasia and physician-assisted suicide was argued before the US Supreme Court this past January, and a decision is expected to be handed down this summer. The subject received attention in the February, 1997 edition of this journal.

In the last year, more emphasis has been given to the wider utilization of hospice care and pain relief for terminally ill patients.

So progress has been made and the issues have been moved to a more prominent position in the attention of health professionals and the general public.

The second issue was **government intervention in medical care** as exemplified by Wisconsin Assembly Bill 441. This bill called for a 24-hour waiting period before an abortion could be performed and set forth a laundry list of potential complications of abortion which any physician to whom a question about abortion was directed had to review with the patient, whether or not that particular physician would be performing the procedure. Penalties for failing to provide the information extended up to $10,000.

The bill was enacted into law as Wisconsin Act 309 of 1995. An injunction against enforcement of the law was issued by Judge Barbara Crabb. A suit challenging the law was filed in the Federal District Court for the Western District of Wisconsin by, among others, three Wisconsin physicians. Oral arguments were presented before Judge Crabb in October, 1996; written briefs were submitted in December 1996, and a decision by Judge Crabb on the issue is expected this year. Whatever the decision, it is expected that the losing side will appeal the case to the US Seventh Circuit Court of Appeals in Chicago.

Thus, although the issue in this particular case was the emotionally-charged one of abortion, the principle involved, the right of physicians to practice medicine without undue interference by the state, has been defended.

Richard H. Ulmer, MD

The third issue I initially discussed concerned **for-profit managed care operations**, their exorbitant CEO salaries, their siphoning of health care dollars from provision of health care to the provision of dividends to their shareholders, and the use of gag clauses on physicians and arbitrarily-imposed length of stay rules for hospital care of various health conditions.

Exposing these abuses to the light of day has resulted in substan-

tial changes in gag clause rules and the length of stay issue. The media have fulfilled their mission "to comfort the afflicted, and afflict the comfortable" with beneficial results for us physicians and our patients.

The fourth issue was the social problem of the **lack of health care insurance availability**. In April 1996, it appeared that the Kennedy-Kassebaum Bill providing for insurance for pre-existing conditions and for portability of health insurance when an employee loses a job, would be held hostage by the legislative gridlock in Washington.

But happily, the bill became law, and there is now a movement in Washington to provide health care insurance to more children who previously have been without insurance coverage. So, although the issue of universal coverage is far from resolved, some steps have been taken to provide coverage for those without it, and to maintain coverage for those who are changing or losing their jobs.

A new issue which I had not anticipated when I was selected as president-elect in April 1995 and then took office in April 1996, was the departure of Tom Adams as SMS EVP. Tom had encouraged me to run for the president-elect position as I was completing my nine year tenure as a director, six years of which had been as chair of the board of directors.

When Tom called me in Marshfield to advise me of his decision to leave the SMS after ten years to accept the position as EVP of the Medical Group Management Association, I told him, after congratulating him on his new position, that if I ever wrote an autobiography, I would title the chapter dealing with my term as President of SMS as "Seduced and Abandoned."

The apprehension about change in the organization has resolved very completely. The EVP search committee, headed by Board Chair, Ray Zastrow, MD, worked diligently screening and interviewing exceptionally talented applicants. Its efforts resulted in the hiring of John Patchett, JD, as our new EVP. John has taken control in an admirable fashion, and with his recent hiring of David Kemp to replace both Lee Johnson, the recently retired Chief Operating Officer of the SMS Holdings Corporation and Jim Paxton, former Deputy EVP of SMS, who left the SMS in January after eight years to join Tom Adams at MGMA in Colorado, Mr. Patchett is well on his way in his management tenure with SMS, directing a very capable staff as they work to carry out the policies set by the Board and the House of Delegates and implement the strategic plan of the society.

About one month remains of my year as president. I have enjoyed the year completely. Any success that has been achieved is due in large part to the support of the SMS staff, whose efforts have been whole-hearted and fully in support of the Society and its members. We all are very fortunate to have such a talented group working in support of us physicians and our patients as the SMS works to accomplish its purpose "to bring together the physicians of the State of Wisconsin, to advance the science and art of medicine and the better health of the people of Wisconsin, and to secure the enactment and enforcement of just medical laws."❖

Letters to the Editor

No Prophet of Doom; Concerned, Involved Physician

When one is referred to as a "prophet of doom" a response, or at least a clarification, is indicated. I am referring to my characterization as "Managed Care's Prophet of Doom" in the January 1997 issue of the *Wisconsin Medical Journal*. This reference was the introductory sentence in an article by Howard Bell entitled "Working for the Plan: Physician Autonomy Under Managed Care."

The quotations attributed to me in that article are 100% accurate and I stand by them. The tone of the article and its characterization of my attitude and involvement are, however, quite incorrect and require clarification.

Let me first state that the intention of this article and where it was to be published were not revealed to me at the time in which my comments were recorded. Nonetheless, I do think my comments, although outspoken, were quite accurate. It is incorrect, however, to characterize me as a "prophet of doom." Quite the contrary. I believe that my record is one of active engagement and passionate interest in the current dialog regarding the role of managed care.

I think it was a disservice to the readership not to include my involvement both at the Milwaukee County and State Medical Society levels with reference to managed care. Let me clarify the record. I currently serve as the Chairman of the Milwaukee County Medical Society Committee on Organization, Finance and Delivery of Health Care. In that capacity, I also Chair a community organization called the Community Coalition for Health Care Quality. This group is represented by integrated health care systems in the Milwaukee area, insurers and other interested parties. This group is actively working to improve the quality of health care in our community and to interface in a constructive manner. I am also currently serving on the Board of Directors of the Medical Society of Milwaukee County and was the secretary/treasurer in 1996. I also serve as the Vice-Chairman of our delegation to the State Medical Society House of Delegates and on the Managed Care Subcommittee of the SMS Commission on Health Care Delivery and Financing.

I list these involvements as a means of demonstrating to you that I am someone who is actively engaged in the dialogue regarding managed care and not some disgruntled surgeon sitting in the corner of the doctor's lounge with a cold cup of coffee.

I also believe the article made it sound as if my opinions are minority opinions. I believe that my comments represent the feelings of many people. Unfortunately, given the present practice environment, many physicians may be reluctant to divulge their names because of potential or perceived consequences. I fortunately practice in a situation that makes it unnecessary for me to withhold my honest opinions regarding these matters.

I would like to make one final point. I feel it was somewhat irresponsible for the SMS to put together an issue on managed care without including any formalized input from the Medical Society of Milwaukee County. I believe that our area of the state is involved in some rather unique situations with reference to managed care. Our area has also been on the forefront of bringing forward initiatives to assist our membership in dealing with some of the more thorny challenges posed by the managed care industry.

Let me conclude by saying that I believe, as physicians, we should all be working together towards the same end. That is, to continue the highest quality, scientific practice of medicine combined with compassionate care and advocacy. This is something we can and should all agree upon. I therefore, would ask your readership to understand that my interest in working towards a better system of managed care does not make me a "prophet of doom." Quite the contrary, I am actively engaged and very interested in maintaining the highest quality of medical practice and patient advocacy. While I may be outspoken, I am certainly engaged and willing to cooperate to whatever degree I can with those parties that are interested in responsible health care reform.

Ron H. Stark, MD, FACS
Milwaukee Hand Specialists, SC, Wauwatosa

Editor's Note: The WMJ apologizes to Dr Stark for any lack of clarity as to the intent of the article and where it was to be published. We salute his involvement and his fearless outspokenness on the topic of managed care (as we stated on page 15 of the January edition, many of his colleagues appear to hold many of the same views, but were reluctant to be quoted).

Strong Partnerships Between Primary Care Physicians and Specialists Urged

As PRESIDENT OF the Wisconsin Psychiatric Association I wish to thank and commend the editors of the *WMJ* for your choices of topics in the past year. We are appreciative of the very well done April 1996 issue on psychiatry and managed care. We are grateful also for your issues on tobacco, gambling, stress and domestic violence; afflictions which have serious impact upon the lives of our patients. These are problems which originally present in the offices of primary care physicians and, when recognized, can be well handled there. Should they be of a serious or complex nature, we welcome the opportunity to work with you and to lend our expertise. Forming working relationships with all medical specialties and with our patients is a primary goal of our organization.

Partnerships are essential at this time when the general House of Medicine is assailed by threats such as managed care and loss of control which challenge our ethical responsibilities to our patients. There are certain economic and governmental forces which appear designed to create dissension and discord among physician groups. They have succeeded in destroying partnerships, collegiality and camaraderie in efforts to establish competitive markets. Now, more than ever, we need organized medicine to serve as our vehicle for negotiation and education to create a strong unified House wherein all our voices can be heard.

We encourage the *WMJ* to continue to function as an instrument for communication of our concerns and needs. Each speciality has its singular issues and it might be of use to share these each month in a special column dedicated to the most pressing items for pediatricians, internists, family practitioners, dermatologists, surgeons, radiologists etc.

In this vein, I would like to inform physicians of a major change which is in process in the mental health delivery system. In June, [1996] Governor Thompson assembled a 40-member Blue Ribbon Commission on Mental Health to review and revise the mental health care delivery system for the State of Wisconsin.

Members of the commission consist of providers, consumers, legislators, administrators and citizens in the public and private sector who have an interest in the future direction of mental health in Wisconsin. The work of the commission is to recommend changes to the present 51:42 system. These changes will be in governance and in access to services. Partnership ventures with state, regional, public and private agencies will be emphasized. There will be attention to early intervention and to promoting recovery and independent living in the local community. The three physician members of this commission are Drs Robert Beilman, Kenneth Robbins, and myself who have been very active in the development of the plan. Feel free to contact any of us.

Lucille Glicklich-Rosenberg, MD, Milwaukee
Wisconsin Psychiatric Association ❖

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Guest Editorials

Alternative Medicine — Is it a New Payment System or a Weird Remedy, or Just Another Way to Solve a Medical Problem?

by John H. Renner, MD

THERE IS A BUZZWORD being used these days by many physicians, politicians, beauticians, and magicians. Everyone will define it differently. The confusing term is so-called alternative medicine. The Office of Alternative Medicine at NIH has just changed its name to OCAM, the Office of Complementary and Alternative Medicine. Isn't that helpful?

Other terms with similar, confusing connotations are integrative, unorthodox, new medicine, unconventional, synergistic, natural, holistic, New Age, 21st century medicine, unproven, or nonscientific.

Some incorrectly define it as what is not paid by insurance, not taught in medical school, or a treatment that you do not tell your physician about.

I think it really is treatments that have no evidence for efficacy. You may need to correct any self-serving definition that includes subjects belonging to scientific medicine such as prevention, exercise, patient education, nutrition or compassion. Get specifics when trying to discuss the subject of alternative medicine. It is a slippery topic.

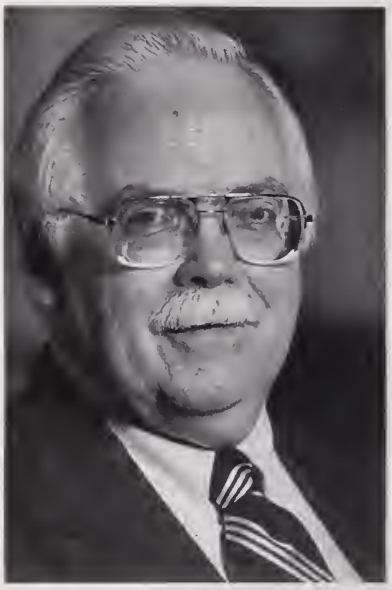
There are numerous books written on Alternative Medicine displaying a dazzling array of therapies and diagnostic techniques. Some books list 40 to 80 topics, some 200, and some up to 800 different subjects. I have studied these topics and decided to divide Alternative Medicine and regular, conventional medicine into five areas based on the criteria of evidence, claims made and specific use.

My five divisions are: **home remedies, quackery, unproven, investigative, and proven**. Examples of each are, in order: chicken soup for colds, rectal ozone for bone cancer, a new herb from South America that monkeys eat when ill, mammistatin research on breast cancer, appendectomy for appendicitis or antibiotics for bacterial pneumonia.

Physicians must learn how to respond to patients who ask about alternative therapies or philosophies. The marketing of these is overwhelming. If you do not know what a product is when asked by a patient, find out. Do not just say, "I don't know," or worse yet, "It probably won't hurt you." What is on the bottle may not be what is in the bottle: Chinese black pearls did not have any herbs listed on the label; instead it contained Valium and cortisone. No wonder some people felt better.

Always ask patients if they are taking any herbs, supplements, vitamins, over-the-counter, or other prescription medicine. If patients go to a chiropractor, ask if they are taking any pills. They may be taking glandulars. Ask for any written material to help you understand what this new remedy might be all about.

Do not agree to use any product your patients sell. You may become part of the problem, not part of the solution. Some multilevel nutrition companies are eager, yes anxious, to have physicians as their most famous and distinguished distributors.



John H. Renner MD

Herbalife had some physicians who sold the stuff for awhile. One physician even advertised in the *New England Journal of Medicine*, classifieds.

If you want to find out about any of these kinds of activities, you can refer to several sources: Food and Drug consumer information, the Attorney General's office, the Internet, your Congressperson, the National Council Against Health Fraud, the State Medical Society and Medline. In Wisconsin, the Bureau of Consumer Protection has a hotline for questions and complaints: 800-422-7128.

If you have access to the

John H. Renner, MD, is the director of the Consumer Health Information Research Institute. He is the former chair at the UW Department of Family Medicine.

Internet, there are several sites that may provide good, up-to-date information on alternative medicine and quackery. *Internet Health Watch*, located at *Reuters Health*, at http://www.reutershealth.com/ihw/ contains a weekly column on health information on the Internet. For a more complete discussion of alternative medicine and quackery, see the archives at this site. Other sites to look at are: The National Council Against Health Fraud, located at: http://www.ncahf.org/ and Stephen Barrett, MD's webpage at: http://www.quackwatch.com/

If you get stuck with a tough one, you may call the Consumer Health Information Research Institute (CHIRI) at 816-228-4595. The address is CHIRI, 330 E. Pink Hill Road, Independence, MO 64057, or via e-mail at: drrenner@msn.com. ❖

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Alternative Medicine and Snoring

by Gary Leo, MD, Milwaukee

An article in this issue of the *WMJ* discusses the practice of alternative medicine in the treatment of obstructive sleep apnea (see *Magnetic Therapy is Ineffective for the Treatment of Snoring and Obstructive Sleep Apnea Syndrome*, page 35). Alternative medicine is a difficult field to define precisely. It generally covers any type of treatment which is not recognized by conventional medicine. The treatments may be aimed at a specific disease or health maintenance.

This is a growing field as documented by a study published in the *New England Journal of Medicine* in 1993(328:246-252). It is estimated that one-third of the population will use some form of alternative medicine annually. Annual expense for these treatments may be as high as $15 billion. This therapy is more often used by the elderly with chronic disease.

Most people do not tell their physician about use of this type of treatment. Would we care if they did? The approach of organized medicine until recently was to ignore or dismiss alternative medicine. However, there is a great public demand for such therapy.

In 1991, Congress mandated the formation of the Office of Alternative Medicine within the NIH. The mission of this office is to investigate alternative medicine and when appropriate integrate therapies into conventional medicine. Therefore, alternative medicine is here to stay. Our role should be to recognize that our patients are using these treatments and educate ourselves and our patients about these therapies, especially when these treatments may have a negative impact on health.

I was asked to comment on the impact of alternative medicine in treatment of sleep apnea. As a neurologist, I have dealt with this topic on a daily basis especially when dealing with multiple sclerosis. In my practice of sleep medicine, I have not seen that alternative medicine is commonly used to treat snoring or sleep apnea.

Snoring is a very specific mechanical problem. Alternative medicine is used to generate a sense of well being and improve subjective symptoms. Feeling good doesn't make snoring go away. Various mechanical devices such as nasal strips, nose prongs, special pillows, and nasal lubricants have been touted as being effective in treating snoring. These devices may reduce snoring in people with benign conditions or mild positional apnea but would have no effect on the symptoms of moderate or severe sleep apnea. These symptoms would include loud snoring usually coupled with significant complaints of daytime sleepiness.

"Our role [as physicians] should be to recognize that our patients are using these treatments and educate ourselves and our patients about these therapies..."

Therefore I do not feel that these devices pose a threat to the appropriate diagnosis of obstructive sleep apnea. In fact, given the expense of polysomnography, these devices may be a cost-effective screening tool. Alternative medicines are used frequently to treat insomnia. In fact, I use several therapies myself for insomnia. Nothing beats chamomile tea (Bonomelli brand is best -- whole flower heads) and sleep hygiene.

Gary Leo, MD

I believe there are several factors that account for the appeal of alternative medicine. I will use the article by Donn Dexter, MD, on magnetic therapy and snoring to illustrate these points.

Many people feel that such therapy allows a sense of control which they find lacking in their state of ill health. This is particularly true for those with chronic disease. Many unconventional therapies involve regimes or activities that go beyond merely taking a pill. People become involved in their treatment and have a greater sense of control. The woman with

Dr Gary Leo is board certified in neurology and sleep medicine. He is currently the Medical Director of the Regional Sleep/Wake Disorders Center at St. Joseph's Hospital in Milwaukee, WI.

sleep apnea experienced loss of control when testing was performed on two occasions outside of her home. Use of CPAP would involve sending a stranger to her home to set up the machine. Why should she leave her home when her neighbor will provide treatment in a comfortable setting?

The need to interact and to please also plays a role in alternative medicine. Practitioners of such therapy provide a willing ear. Specific goals may be set which occupy the patient and reinforce the idea that progress is being made. Most people like to please. Fulfilling the expectations of the practitioners may be quite satisfying. The woman in the article wanted to try magnetic therapy to please her neighbor.

Cost itself may often be a factor. The author of the study noted that the machine cost $1,100. To a conventional practitioner this seems an outrageous sum for a worthless machine. However, the cost for conventional treatment in this case is also quite high. Polysomnograms (including interpretation fees) range from $1,500 to $2,500. Rental of a CPAP machine may run $100 - $200 per month with a purchase price of $1,000. The woman in the case report had two polysomnograms, one to establish diagnosis, the second to determine efficacy of CPAP. The bill to her insurer could well have exceeded $6,000. Long-term compliance with CPAP ranges from 40% - 80%. Therefore a number of people are left with a $1,000 machine and $3,000 worth of testing which is no more effective than the magnetic force machine.

Inaccurate medical news reports lead to an erosion of public confidence in conventional medicine. Reports in the media are simplified and sensationalized. People have grand expectations which are not met. This leads to cynicism and leads people to search for other treatments. The problem lies not with reporters and writers but with those of us who allow inaccurate reports to circulate for our own self importance.

Alternative medicine is everywhere, even in the treatment of snoring. The challenge to all of us as physicians is to understand the therapies our patients are using and direct them away from the therapies that may cause harm, and, perhaps, to direct them towards alternative therapy that may be helpful.❖

Correction

In the February issue of the *WMJ*, we published an incorrect photo next to the biography information for Kevin Flaherty, MD, candidate for AMA Alternate Delegate 1998-1999. We wish to apologize to Dr Flaherty for any inconvenience this may have caused him. Below, please find his biography information and the correct photo.

Kevin T. Flaherty, MD

Kevin T. Flaherty, MD received his medical degree from Loyola University in Chicago. He completed his internship at Sacred Heart Medical Center in Spokane, Wash, and his ophthalmology residency at Loyola University. He is Board certified and is a Fellow of the American Academy of Ophthalmology and the American College of Surgeons. Dr Flaherty is the Medical Director for North Central Health Protection Plan, a cooperative health plan of Wausau Insurance.

Dr Flaherty was elected as an Alternate Delegate to the Wisconsin delegation of the AMA in 1994. He served as President of the Marathon County Medical Society (1994-1996), and he has served on the Marathon County Medical Society Executive Committee since 1992; previously, he served as the Marathon County Medical Society delegate to the SMS House of Delegates. He has chaired reference committees for the Young Physicians Section of the AMA and SMS, and he has served on the SMS Task Force on Quality Assessment and Practice Parameters since 1991 (now the Medical Outcomes Research Project). Additionally, he remains active in other professional societies and sits on the American Academy of Ophthalmology Committee on Relations with Organized Medicine (since 1993). Dr Flaherty hopes to continue his work at the AMA as an Alternate Delegate, bringing issues of importance to Wisconsin physicians to the national level.

Comments on the North Shore Breast Cancer Study

by State Representative Sheldon Wasserman, MD, Milwaukee

In 1996, I was invited to speak at a meeting of the Wisconsin Breast Cancer Coalition. I came away from this discussion with grave concerns about breast cancer rates in my North Shore Milwaukee assembly district. I therefore contacted the Wisconsin Division of Health to request an analysis investigating the possibility that breast cancer may be more common among my constituents. The findings from the subsequent study published in this issue of the *WMJ* (see page 46) are both reassuring and a cause for concern.

The results are reassuring because they demonstrate that women in my district are diagnosing breast cancer earlier in the course of the disease. Studies have demonstrated convincingly that mammography can detect cancer early and increase the chances that the treatment will lead to a complete cure. If all women had regular mammograms, the death rate from breast cancer could be reduced by a third in Wisconsin. In fact, a study published in the October, 1995, issue of the *WMJ* showed that the death rate has already begun to decrease, a result of an increasing use of mammography (See Vol 94;551-552.).

On the other hand, the study's findings are a cause for concern in that my district appears to be a "hot spot" for breast cancer incidence and mortality rates in Wisconsin. Unlike most other illnesses, breast cancer has been associated with higher socioeconomic status. Some of this excess risk may be explained by differences in known reproductive risk factors, such as nulliparity, being older at first birth, early age at menarche, or greater use of synthetic hormones. However, the role of other modifiable factors such as alcohol consumption, diet, exercise or environmental exposures is not known.

We need to know more about what causes breast cancer, so that we can provide sound recommendations to women who want to reduce their risk from developing the disease. The findings of this study could be a positive step in that direction; however, funding increases will likely be necessary to accomplish this goal. It should be the obligation of government and private industry to provide monetary support for basic research. Continuous epidemiologic studies, such as the 4-year study currently being conducted by Polly Newcomb, PhD, of the UW Medical School on breast cancer risks and risk factors, must also be funded. Money spent on research is money used constructively.

State Representative Sheldon Wasserman, MD

It has been stated that Wisconsin's top biennial budget priority is to reduce property taxes. I submit that although this endeavor is important, in relative terms it does not compare with the need to improve the health of our citizenry. Fostering good health among all Wisconsin residents via funding for studies and programs should be a paramount state goal.❖

In Memoriam
A Man for All Seasons

by Earl Thayer, Madison

JOHN K. SCOTT, MD, was very special to a great many people. Most of them just called him Kim; he preferred it that way. He was a person who seemed to be everywhere, into everything and known by everyone, in Madison, on the state scene, in national and international medical circles. With his death on February 4, 1997, most of those people felt they had lost a good friend.

Kim came from a medical family in Ohio and began his own career as a Navy hospital corpsman in World War II. He was part of a Navy medical team put ashore at Nagasaki, Japan, to aid atomic bomb casualties and assess the effects of radiation. Much later he would learn that he himself had received a lethal dose. When he returned from service, Kim took his medical degree and otolaryngologic residency at Ohio State University and moved to Madison, in 1958.

His practice flourished as his reputation grew; as a local newspaper put it, Kim soon became "one of Madison's most popular physicians." He worked hard at his specialty; his fellow physicians respected him; his otolaryngological residents from the University of Wisconsin Medical School loved him. He never failed to improve their learning curve; he also taught them his unique bedside-office-side manner, exposed them to the real worlds of medical business, in-house medical politics, the fine points of political campaigning, influencing lawmakers, and working with government administrators...all sandwiched in between occasional golf and dinners at the Blackhawk Country Club. Little wonder his residents came away extolling their experience.

If *Madison Magazine* had been giving its "Best of Madison" award for nose-throat physicians, Kim would have won it for at least a decade. Patients found him both competent and compassionate. He'd stop in at all hours of the day or night to see his patients in the hospital; he'd call them at home just to check on how they were doing. He did the same for friends, even though they weren't his patients. It's easy to love a man who was so free with his own love, so constantly thoughtful, so full of caring.

Kim had an insatiable appetite for the nitty-gritty work of organized medicine. He never met a committee he didn't like. He served on dozens of them; with each he felt compelled to gather and absorb everything he could find on the subject, from scientific publications, libraries, medical friends, and anyone known to have done something in that field. He carried stacks of such stuff to committee meetings; moreover, he had read most of it. This kind of dedication invariably won the attention of leadership, and usually guaranteed that Kim moved up the ladder of organization. He became chairman, director, or president of most of the groups with which he served. Kim's slight stature and easy-going, soft-spoken style sometimes caused people to underestimate his skills and determination. At a time when "peer review" was a dirty phrase among most physicians, Kim called for cleaning out shoddy practices in treating Medicare and Medicaid patients as he served as a director for the Wisconsin Professional Review Organization. When managed care evoked fear and anguish among his fellow independent practitioners in Madison, Kim helped form the Physicians Plus Medical Group and HMO arguing that grouping talents and heightened competition would likely raise, not lower, technical competence and ethical conduct thus leading to better quality care for patients. He had a

John Kimball Scott, MD, upon receiving the SMS Director's Award in April, 1995.

Continued on next page

Earl Thayer was a friend of Dr John K. Scott's for many years, and, as the SMS EVP from 1971 to 1987, worked alongside Kim Scott to enhance the SMS's purpose and function. Mr. Thayer would like to note that he was aided in preparing this memorial by conversations with the following: Cyril "Kim" Hetsko, MD, chair of the Wisconsin Delegation to the AMA; Carl Weston, MD, vice president of medical affairs, Meriter Hospital; Ralph Hawley, Madison; and Manucher Javid, MD, Emeritus Professor of Neurology, University of Wisconsin Medical School.

Continued from previous page

talent for improving the environment of medical practice through better understanding of the delicate intricacies between medicine, religion and ethics.

Kim was president of the State Medical Society in 1986, after years of serving on its Board of Directors. He served in similar roles in the county medical society, the otolaryngological society, the Wisconsin Chapter of the American College of Surgeons, and the American Cancer Society. For nearly 20 years, he was a delegate from the SMS to the American Medical Association; out of his wide medical organizational experience, he was named chairman of the AMA's Council on Long Range Planning and Development to lead the nation's largest physician association in a total restructuring of its goals and programs in order to guide it into the 21st century.

There is, perhaps, some sweet irony in the fact that a war-time radiation incident at age twenty foreshadowed his death fifty years later, but also energized Kim into a lifelong devotion to hopeful concern for the future of mankind on this planet. At the height of the Cold War, when the nation seemed on the brink of a missile war with Russia, Kim became an activist for Physicians for Social Responsibility and successfully pressed the SMS to adopt a strong position against nuclear proliferation and warfare. With his retirement, Kim became a vigorous supporter of the International Society of Doctors for the Environment, and at the time of his death he was president-elect of its American chapter and vice president of its North American unit. His commitment to medicine and the preservation of the environment, and his years of positive influence on State Medical Society policies and programs prompted the SMS to present Kim with its highest honor, the Director's Award, in 1995.

No tribute to Kim would suffice without tribute to his wife, Louise, who not surprisingly was an enormous influence in his life. They were the consumate couple, exemplifying the beauty of individuality while embracing the blessings of togetherness.

The medical profession, physicians, patients, and society have indeed lost a good friend. Perhaps we can take some comfort from a hope that the Good Lord has already found an appropriate niche for Kim in his Heavenly bureaucracy...as chairman of His long range planning committee!❖

Point...Counterpoint Discussion About the February, 1997 WMJ Vingettes

An Ethical Walk Through the ICU

by Philip Doughtery, MD

SINCE THE REPORT of the SUPPORT study published in *JAMA* in November 1995, activities in the ICU have come under close scrutiny. The following scenarios are adaptations of real patients' situations that have been admitted to a unit nearby.

Scenario 1

In the first bed is a 90-year old white male who has had advanced COPD for several years and for the past six months has been continuously oxygen dependent. He has developed a pneumonia and is now on a respirator for the fifth day. The family knows that he would rather not be on the respirator, but want him "kept alive" until a favorite grandson can be flown home from Germany where he is on active duty with the US armed forces.

Question 1: Should there be an age limit for admitting patients to an ICU? If so, what is the age? 65-75? 85?

***WMJ* reader comments:**

"Yes. 75 [should be the limit]." *J.T.*

"That [age limit for admitting to an ICU] ought to be an issue that is discussed before a patient is admitted to an ICU, and I don't believe there is any "upper limit" for an age." *R.D.*

"An 'age' criterion for admission to the ICU presents a precarious slippery slope. There are many 80 year-olds that have better prognoses than 60 year- olds. How did this gentleman end up on the respirator anyway? Was he offered the choice of comfort measures?" *W.H.*

"...There should be no age limit to admission to the intensive care unit. I think that should be obvious." *W.C.*

"...The use of chronological age as a marker for the distribution of medical services, I believe, has significant problems. There are little scientific data to support the notion that chronological age is a predictor of biological function. Although studies can be cited where age has been shown to be associated with poor outcomes, much of this research is flawed since age may be linked to other more powerful predictors (e.g., functional status, APACHE scores, etc.), rather than being a primary independent predictor. Since chronological age is so easy to measure, there is the temptation for researchers and readers of the literature to look simply at age and not recognize more important markers of outcome....In summary, I would answer...that age should not be the sole criteria for admission to the ICU...." *E.D.*

Ethics Commission's recommendations

The commission members all agreed that although it is reasonable to begin to be more selective about who is admitted to the high technology of the ICU, the decision should not rest on chronological age, but rather on an estimate of physiologic age. Thus, those people who are seriously ill and afflicted with multiple disease which result in a poor prognosis would not be admitted to the ICU.

Question 2: Is the family's request to "baby-sit" and "prolong his life" for the stated reason a valid one?

> The SMS Medicine and Ethics Commission regularly reviews ethical vignettes which are presented here for your consideration.
>
> The commission recognizes that its opinion cannot represent all perspectives and is interested in hearing from those of you with different ethnic backgrounds which may result in different experiences.

***WMJ* reader comments:**

"No." *J.T.*

"A request to 'baby sit' and prolong the patient's life is reasonable and valid in lieu of the fact that the patient is not brain dead or otherwise being in a prolonged vegitative state. It appears by the description that he is alive and aware enough to want to see his grandson." *R.D.*

"Keeping a terminally ill patient alive solely for the purpose of being able to bid farewell to all family members is not fiscally responsible, but may be ethically reasonable." *W.H.*

"A family's request to maintain the patient for a short period for family reasons, I believe, is also reasonable. It is certainly the compassionate thing to do, if not a wise use of

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health care dollars. However, I think the benefits to society to act in such a way outweigh the burden on ecomomics." *W.C.*

Ethics Commission's recommendations
Although the language of the question is inflammatory and derisive ("baby sit" and "prolong his life"), the commission members felt that we are treating the family as well as the patient and that likely the one or two days needed for the grandson to get home would not be excessive.

★ ★ ★ ★ ★

Scenario 2
In the next bed is a 68-year old male who is in his third post-operative day where a laparotomy has demonstrated a widely disseminated malignancy including metastasis to the liver. The operating surgeon is preparing to place a "G-tube" to feed the patient. There is an advance directive where the patient has elected to not be "kept alive by artificial means" if he has a terminal disease. The surgeon states, "I just operated on him! I can't just let him die."

Question 1: Does the advance directive as stated, permit the placement of the feeding tube?

***WMJ* reader comments:**
"No." *J.T.*

"The answer would seem to be no." *R.D.*

"...not only does the advance directive not permit the insertion of a gastronomy tube, it makes no medical sense unless the prognosis for short-term survival is reasonably good or the patient needs time to get his affairs together. Since the patient would appear to be competent, in spite of the surgeon's request, the patient should be asked again what he wants and if he does not want the G tube, he should tell the surgeon." *W.C.*

Question 2: Is the surgeon's rationale acceptable and ethical?

***WMJ* reader comments:**
"No." *J.T.*

"Is the surgeon's rationale acceptable and ethical? No, based on the patient's wishes and if the surgeon could not live by those wishes, then he might need to relinquish his care of the patient to some other physician who would follow the patient's wishes." *R.D.*

"The surgeon's rationale is self-serving and does not deal with the patient's needs. This being true, it is neither acceptable or ethical." *W.C.*

Question 3: With the knowledge that the patient has an advance malignancy with a negative prognosis, should the patient have been admitted to the ICU at all?

***WMJ* reader comments:**
"No." *J.T.*

"With the knowledge that the patient has advanced malignancy with a negative prognosis, should the patient be admitted to the ICU at all? The problem I had with this question was whether the knowledge of the advanced malignancy occurred before or after the patient was operated on. If it were before he was operated on, then one would have to decide if he should have been admitted to the ICU at all. If it were found after the operation and the decision for even admitting him to the ICU would depend on what was planned for the patient's ultimate care." *R.D.*

"The patient's diagnosis should have no bearing on whether he is an ICU patient. The level of care he requires for his comfort, etc., should be the ruling principle." *W.C.*

Discussion among Commission members
The Commission members answered the three questions by acknowledging that the surgeon probably has a right to expect his patient to be cared for in the best way possible at least for a day or two post-operative.

This would also allow for discussions with the family members, and with the patient himself if he is decisional, and then be moved to a step-down unit.

★ ★ ★ ★ ★

Scenario 3
In the third bed is a 42-year old female drug addict who is in the midst of a terminal meningitis and who has been HIV positive for eight years. She has had several previous hospital admissions for pneumonias and associated problems and has shown signs suggestive of dementia over the past six months.

Question 1: Should we allow patients with terminal illnesses to be admitted to ICU?

***WMJ* reader comments:**
"No." *J.T.*

"My postion would be no and it should be an issue discussed prior to even considering admitting the patient to an ICU." *R.D.*

"If death is imminent, ICU admission is not appropriate unless staffing elsewhere is inadequate to administor reasonable comfort measures. Death is not always imminent in terminal diseases and therefore ICU admission may be appropriate to stabilize the patient." *W.H.*

"Of course patients with terminal illnesses should be in intensive care

if they need that level of care for their well being." *W.C.*

Question 2: Should we allow demented patients to be admitted to ICU?

***WMJ* reader comments:**
"No." *J.T.*

"My position would be no and it should be an issue discussed prior to even considering admitting the patient to an ICU." *R.D.*

"There are all levels of dementia. If there is no advance directive limiting care, we are ethically obligated to admit this patient for stabilization unless the family is opposed to this plan." *W.H.*

"The same principle holds: if they need care at that level, they should receive it regardless of their mental state." *W.C.*

Question 3: Should we exclude ICU care to the patient with AIDS?

***WMJ* reader comments:**
"Yes." *J.T.*

"No. I do not believe it is legal to exclude ICU care to the patient who has AIDS where that level of care might be appropriate." *R.D.*

"The life span of AIDS patients is unpredictable. They deserve the same rights that any critically ill patient has." *W.H.*

"A patient's HIV status should not bear on where they are cared for. It does not seem pertinent." *W.C.*

Ethics Commission's discussion
The discussion centered around these three questions started with requests to further quantify or define "terminal illness," the degree of "dementia," and the stage of AIDS for this patient.

In general, the commission members felt that when patients are felt to be very near death (anticipated within days), or are severely demented and institutionalized, or have had three or more serious infections with AIDS, perhaps restricting ICU care would be acceptable. The new drug therapies for AIDS patients made some members of the commission reluctant to restrict ICU for AIDs at all. ❖

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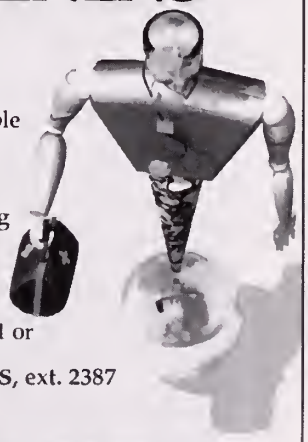

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Alternative Medicines — Do you Know What Your Patients are Using?

by Judith D. Burke, managing editor

ALTERNATIVE MEDICINES. Complimentary medicine. Holistic medicine. What do these terms mean for you and your patients? Like most things in medicine, there is no simple, single definition; the term alternative medicine is applied to a myriad of treatments, therapies and procedures used by the vanguard but not the mainstream of medical practitioners.

If you were to survey your patients on the topic, you would get a wide variety of answers, from chiropractic to crystal healing.

For every 'alternative' therapy today, there are many conventional, well-accepted and practiced methodologies that, a few years or a few decades ago were considered alternative. But certainly, when we talk about alternative medicines we realize that it's a growing area of concern for allopathic, or Western-trained, physicians, for as many reasons as there are alternative treatments.

By now, those of you with an awareness (either positive or negative) of alternative medicine are familiar with the Eisenberg paper, *Unconventional Medicine in the United States*, published in *JAMA*, in 1993. And, you are probably aware of the fact that the NIH created a special office to specifically address alternative and complimentary medicines (OCAM) and practices.

But what of your patients' views on alternative medicine? Do you know which of them are among the millions of Americans spending upwards of $15 billion on "remedies" you are neither providing nor prescribing?

According to medical experts on the vast array of alternative treatments available, you need to know what your patients are doing in this arena. Beginning on page 8 we bring you a special Guest Editorial by John Renner, MD, formerly of the UW Department of Family Medicine and now Director of the Consumer Health Information Research Institute. He shares his insights regarding the need for physicians to be aware of what's being offered to patients by alternative "healers." On page 10 you'll find an editorial that addresses one specific type of alternative therapy for snoring—magnetic therapy, which is looked at in a paper also published in this issue (see ***Magnetic Therapy is Ineffective for the Treatment of Snoring and Obstructive Sleep Apnea Syndrome*** **beginning on page 35**).

Many health care professionals are skeptical of the benefits touted by so-called natural healing. Certainly, there are plenty of quacks and plain old thieves robbing desperate patients of both hope and money. But we found several of your colleagues who, because of a dissatisfaction with the limits of traditional medicine, turned their practices towards finding solutions found in ancient Eastern-type remedies. They share their stories beginning on **page 21** in the feature story entitled, ***Natural-Borne Healers.***

When thinking about the remedies that are being sold at health food stores and grocery stores across the country, through

Continued on next page

Strange Today; Commonly Accepted Once Proven Tomorrow?

Some of the alternative therapies currently under study with grants provided by the NIH include:

- Acupuncture to treat depression, attention-deficit hyperactivity disorder, osteoarthritis, and postoperative dental pain.
- Hypnosis for chronic low back pain and accelerated fracture healing.
- Ayurvedic herbals for Parkinson's disease.
- Biofeedback for diabetes, low back pain, and face and mouth pain caused by jaw disorders.
- Electric currents to treat tumors.
- Imagery for asthma and breast cancer.

Continued from previous page

infomercials and direct marketing campaigns, one has to remember that this type of activity has been taking place for centuries. In the popular American culture, they were represented by 'snake-oil salesmen' or called "patent medicines."

These remedies made great claims about curing everything that could possibly afflict a person from constipation to colic in infants, to warts, hearing loss, and headaches. Some of these remedies are, in fact, tried and true: fiber, as advertised in cereal, does aid in digestion and reduce constipation. Carbonation does produce a soothing effect on the stomach as in Alka-Seltzer™ of today, or bicarbonate of soda in yester-year.

The *WMJ* found that these and countless other products were heavily advertised in the very pages of this *medical* journal in the early part of this century. Sanitariums (today, high-priced spas) were advertised for treating everything from diabetes to mental anguish, to of course, tuberculosis.

We've reproduced a few of the advertisements for alternative therapies found in the *WMJ* during 1923 and interspersed them throughout this issue. While some of the ads were trite and the products fell by the wayside, others, like the vaccine for diphtheria, are still used today.

Looking at these ads helps remind us that medicine is an evolving art and while tremendous advancements have been made, we're still discussing some of the very issues raised by the ads for "patent medicines" that were sold in 1923.

The point is that alternative medicine is not a new phenomenon. And it's not one that's simply going to go away. The need then is for medical science to familiarize itself with accepted, proven techniques that may indeed be outside the realm of conventional medicine, but that work, nonetheless. Science must also identify those treatments that are simply empty claims, or worse, harmful to patients by exacerbating existing conditions or bringing on new ones.

Only by looking at this industry with a scientific eye that is both critical and open, will physicians be able to help their patients by offering a full spectrum of treatments and therapies. ❖

Covering Collaborative Care

Both alternative care providers and insurers who cover them stress that such therapies are not designed to replace western medical protocols. In fact, they say, the term "alternative care" is a misnomer.

"What we do really isn't designed as an alternative to Western medicine," says Julie Dieterle, a physical therapist and partner in a Madison firm offering reflexology, reiki, cranio-sacral and deep-tissue massage therapies. "What we offer really is complementary or collaborative therapies."

Tom Maroun agrees. "I think we're getting to the stage where we view these (therapies) as extensions of the definition of physician."

As alternative medicine product manager for American Medical Security, Inc. in Howard, Maroun's view is a significant one. The Brown County insurer, which administers health plans underwritten by United Wisconsin Life Insurance Company and United Wisconsin Insurance Company of Milwaukee locally and in 31 other states and the District of Columbia, recently developed HealthCareChoice$, a plan integrating mainstream and alternative medical coverage.

AMS's plan currently is being test-marketed to individuals and small groups in Arizona, with plans to introduce similar coverage in Chicago, Des Moines, Denver and Seattle. If and when the plan debuts in Wisconsin, it will do so in Madison, which Maroun says is where the lion's share of the state's complementary or collaborative therapists reside.

"We've always covered chiropractic benefits," Maroun explains. "The additional ones would be acupuncturists, naturopathic physicians and massage therapists."

Excerpted with permission from Collaborative Care by Michael Muckian which first appeared in the January 1997 edition of Corporate Report Wisconsin.

Natural-Borne Healers

by Marc Kennedy, special to *WMJ*

Ray Purdy, MD, was the quintessential conventional physician.

He trained at the University of Wisconsin Medical School in Madison, serving as chief resident in internal medicine. Also, there was a year of surgery at Gundersen Clinic in La Crosse and additional training in emergency room medicine that included weekly excursions in a medical trauma helicopter.

Yet despite possessing some of the best and most advanced training Western medicine offers, Purdy found that he did not always have the right answers.

About 10 years ago, Purdy's partner developed lower back pain. She had access to all the modern conventional medical therapies, but still found no relief. Perplexed and intrigued by this, Purdy began investigating other modalities that focused on treating long-term pain and chronic conditions. That interest eventually led Purdy to the Michigan State University School of Osteopathy in 1988, where he earned 400 CME credit hours.

Ray Purdy, MD, consults with a patient who is experiencing low back pain.

Treating the whole person

Since then, Purdy has altered his medical practice, moving from the more standard "allopathic," or Western model of medicine in which he was highly trained, to concentrate on "manual therapy." The latter focuses on treating chronic muscular and skeletal problems by combining osteopathy, physical manipulation and methods that focus on the link between body and mind, emphasizing treatment of the whole person as opposed to symptoms and conditions.

"Philosophically, my medical training had centered on treating infectious disease, acute conditions and injuries, which allopathic medicine does very well," explained Purdy.

"Now, I have become more interested in healing. To do so, you need a broader picture of the whole patient. You have to get to know the person, look at their whole lifestyle as well as symptoms to try to get at the root of problems."

> *"I have become more interested in healing. To do so, you need a broader picture of the whole patient."*
>
> *--Ray Purdy, MD*

Purdy prefers to refer to this approach as "complementary" rather than or "holistic," because such designations tend to polarize the medical community. He certainly does not advocate that patients abandon allopathic medicine by any means. Rather, Purdy emphasizes the importance relying on the medical paradigm that best addresses the nature of a particular health care problem, whether the solution lies in surgery, acupuncture or homeopathy.

Growing mainstream support

And Purdy is hardly a lonely voice in the wilderness.

Until recently, the medical establishment largely ignored unconventional modalities or relegated them to the status of snake-oil elixirs, leeches and blood-letting. But as more people began to try and benefit from alternative remedies after finding little or no relief in allopathic medicine, public skepticism began to fade as demand increased. In turn, this rising public interest, or in Purdy's case, a combination of intellectual curiosity and professional concern for finding new methods to assist patients, have prompted allopathic medical practitioners to investigate the value of complementary therapies.

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Alternative therapies are gaining interest in medical school curricula as well. As of 1996, 34 medical schools in the United States, including Harvard, Yale and Johns Hopkins, are offering alternative medicine courses.

(See box on page 23.)

Even the American Medical Association, which 20 years ago considered associating with chiropractors "unethical," passed a resolution in 1995 suggesting its 300,000 members "become better informed regarding the practice of techniques of alternative or unconventional medicine."

In addition, in 1992 the National Institutes of Health established the Office of Alternative Medicine. (The name was recently changed to the Office of Complimentary and Alternative Medicine.) OCAM has begun a series of trials investigating the efficacy of 26 therapies, including guided imagery to control asthma, Chinese herbs to treat hot flashes and hypnosis to treat back pain.

A further harbinger of mainstream acceptance is action taken by the insurance companies. Scarcely an industry known for taking extraordinary risks, several notable companies have begun covering certain licensed and regulated complementary therapies. Blue Cross-Blue Shield of Washington and Alaska instituted pilot projects involving alternative therapies several years ago.

In October 1996, Oxford Health Plans, a major insurer in the Northeast became the first company to offer its 1.4 million members an opportunity to consult a network of credentialed alternative medicine practitioners including acupuncturists, chiropractors, naturopaths, massage therapists, yoga instructors, clinical nutritionists, and registered dietitians.

Last year, Washington became the first state to require reimbursement for treatment performed by any licensed or certified health care practitioner including massage, acupuncture and some 30 other techniques.

Nothing new

Detractors dismiss many alternative therapies as unscientific, unprofessional and potentially dangerous. Yet proponents point out that many of these approaches are hardly "new."

"Acupuncture and traditional Chinese medicine are 3,000 years old," Purdy says, "while what we consider modern medicine goes back maybe two hundred years."

He adds that the allopathic model was not always the prominent medical archetype in this country either.

"At the turn of the century in the US, there were three schools of thought in medicine — allopathic, osteopathic and homeopathic — and they were not necessarily exclusive," says Purdy.

"As healers, we need to see people as more than labels of their medical conditions."
--Rose Kumar, MD

"The advent of antibiotics and successes against infectious disease in the 1920s created a ground swell of interest in and support for allopathic medicine. As it began to gain greater stature, the other two got left in the dust. Until recently, they kind of got lost. Now, the strengths of osteopathy and homeopathy are being rediscovered. There is certainly a place in modern medicine for all three, as well as other approaches to health care."

Holistic and traditional medicine like acupuncture have been around for thousands of years, and have plenty to offer modern medical practitioners, says Rose Kumar, MD, of Oconomowoc. But there is more to it than that, she ascertains.

Rose Kumar, MD

"There is an entire paradigm shift in the health care system. Patients are demanding it. They wanted to be treated as people, not just a bag of protoplasm or a bundle of symptoms. They are tired of physicians hiding behind technology, they want them to pay attention to their whole being."

Kumar says that as the allopathic medicine advanced, practitioners became enamored with technology, while the traditional imperative to heal waned. There was a loss of balance, as she puts it, between the positive influences of both "masculine" and "feminine" influences in medicine.

"We began to emphasize technology, the masculine aspect; the urge to fix and cut," Kumar explains.

"But we lost the feminine side of medicine — the nurturing, the healing. Often, what people need is healing, not fixing. We stopped listening to patients. But we're starting to get some of that back, to helping people evoke the healing process within themselves. When combined with allopathic therapies, you can potentiate the

Medical Schools Embracing Integrated Therapies

More physicians today are looking alternatives to high-paced conventional medicine, and are becoming interested in complimentary therapies for treating chronic conditions or pain. Various accredited training centers, many affiliated with renown allopathic medical schools or centers have emerged.

An American Medical Association resolution last year suggested its 300,000 members "become better informed regarding the practice of techniques of alternative or unconventional medicine." Of the 125 medical schools in the United States, 34 offer courses on alternative medicine, including Harvard, Yale and Johns Hopkins. The Arizona Center for Health and Medicine in Phoenix offers a certificate in complimentary medicine to family practitioners. UCLA features a 200-hour acupuncture course of study, while students at Wayne State University School of Medicine can take a four-week elective involving chiropractic, yoga, meditation, biofeedback, hypnosis and therapeutic touch. Wayne State even offers its own Alternative Medicine home page on the Internet.

At this time, the University of Wisconsin Medical School does not offer such courses per se. However, medical students are exposed to information on alternative therapies in their third and fourth years, and are encouraged to seek it on their own, according to Sheldon Horowitz, MD, associate dean for curriculum.

"Medical students should know about alternatives that patients may be already using," said Horowitz. "Practically, physicians should know this when considering antibiotics or other therapies to prevent any unanticipated problems."

Horowitz added that much of the data concerning the scientific value of alternative therapies at this point is still anecdotal. Nonetheless he says, medical students have plenty to learn from these practitioners.

"Students can certainly learn how to better communicate with patients, an aspect that these complimentary therapists do quite well," said Horowitz.

"Certain approaches have proven useful for treating certain conditions; for example, acupuncture for chronic pain."

UW medical students themselves are interested, and have sponsored talks by alternative therapists, including a demonstration by a massage therapist. Horowitz added that the med school is in the process of reviewing and reorganizing the curriculum, and discussions of complimentary modalities will be incorporated into future courses.

At the Medical College of Wisconsin, Rose Kumar, MD, has helped to establish the "Association of Integrative and Complimentary Medicine" to educate medical students about alternative approaches to health care.

Though not a formal part of the curriculum, the association meets monthly to critically evaluate complementary medicine. This includes literature searches and presentations, a journal club and appearances by practitioners who integrate conventional and alternative health care methods.

"It's imperative that students at the grassroots level expand their knowledge base and their view of health care," says Kumar, who also serves as a mentor for four MCOW students.

"The response is growing among students, who recognize that technology can only do so much. They are finding there is more to medicine than putting Band-Aids on people."

results.

"I practice state-of-the-art conventional medicine, but I integrate homeopathy, acupuncture, and holistic psychotherapy — not just above the neck, not just the mental or cognitive, but for the whole person," adds Kumar, who trained at Stanford University Medical School.

"As healers, we need to see people as more than labels of their medical conditions.

"I've been on the other side of the fence, as a patient. The patient who puts trust in the power of the health care provider who can't see beyond the service level is not being healed. It can be a horrible experience."

Critics doubt effectiveness...

While alternative therapies continue to attract interest by physicians, there are still plenty of critics; nay sayers who consider prescribing Saint-John's-Wort instead of Prozac or saw palmetto for prostititis as tantamount to committing a modern version of alchemy. One noteworthy critic, retired psychiatrist Steven Barrett was quoted as referring to Chinese medicine as "loony as hell" and homeopathy as "complete nonsense — not even worth testing." Barrett, who describes himself as a "quack-buster," maintains that physicians practicing alternative therapies should have their licenses revoked.

A book he co-authored, *Reader's Guide to Alternative Health Methods*, argues that there is little or no proof that alternative therapies work. He and other critics contend that most of the evidence of the effectiveness of alternative therapies is anecdotal and testimonial, and that these modalities have yet to undergo the rigors of double-blind, placebo-controlled studies.

...Studies support effectiveness

Defenders counter that many

Continued on next page

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contemporary medical practices have not been subjected to such scrutiny either, and point to several examples of studies that indicate the value of complementary therapies:

- A University of Miami study indicated that premature babies given daily massages gained weight faster and left the hospital sooner than those who were not;
- A Stanford University study that breast cancer patients who participated in support groups lived 18 months longer on the average than women who did not;
- A program of meditation, exercise, group support and a low-fat diet can halt progressive heart disease and actually reverse it.

Regulating alternative medicine

The Medical Examining Board in Wisconsin considers alternative practices outside the realm of professional conduct, but does not necessarily target complimentary practitioners for censure.

"These methods are not a part of medical board purview," says James L. Esswein, MD, MEB member. "The board responds to problems with physician practices as brought to our attention by patients, pharmacists, and other health care practitioners.
"The Board looks at whether the physician deviated from the standards of practice of allopathic medicine and whether this could harm or has hurt patients."

Esswein adds that the Federation of State Medical Boards has established a subcommittee on alternative medical practices, and that several states have established alternative medical boards to review and monitor practitioners of such modalities. For example, Arizona, Nevada and Connecticut have separate boards for regulating homeopaths, while Alaska, Arizona, Connecticut, Hawaii, Montana, Nevada, New Hampshire, Oregon, Utah, and Washington have boards for naturopaths.

While many health care professionals, some grudgingly, have come to recognize the value of chiropractic, acupuncture and massage performed by qualified professionals, the one type of unconventional practice that is sure to raise a red flag is chelation therapy. This ion therapy for treating heart disease is unproved, and according to Esswein, its practitioners in this state will likely attract the attention of the medical board.

"The bottom line for me is how can I help a person? Sometimes we have to acknowledge limits of medical model. Other times, it's exactly what's needed."

--Jerome Lerner, MD

Alternative, but serious medicine

According to one physician who has ventured out of the mainstream in search of relief for patients, doctors who embark on such quests for knowledge are just as professional and serious about new modalities as they were in medical school.

"As an MD, it is my role to be diligent for my patients," says Jerome Lerner, MD, of Brookfield, who, like Purdy, has centered his practice on manual therapy.

"I am currently focusing on body work to treat chronic pain, incorporating various approaches from chiropractic, massage therapy, and cranio-sacral release. I have adopted new techniques and methods little by little, over several years.

"If I were to begin to take more of an interest in say, homeopathy or herbal medicine, I would certainly do a literature search, and ensure I knew what I was getting into.

"The bottom line for me is how can I help a person? Sometimes we have to acknowledge limits of medical model. Other times, it's exactly what's needed. Appendicitis? Surgery, you bet. Other problems are in more of a gray area: somatic problems; bowel dysfunction; depression; insomnia; fatigue. These become expressions of distress that you don't find allopathic solutions for easily.

"So, as MDs, we need to take deep breath and be open to other methods, find resources that go beyond pathology, to seek a more integrated approach."

Helping patients help themselves

Like Rose Kumar, Ray Purdy and Jerome Lerner use the phrase "paradigm shift" when discussing their evolving approach to medicine.

"It's really a matter of how you look at your relationship with patients," says Purdy, who admits that he used to follow the "Marcus Welby" format, dispensing prescriptions, advice and orders like a stern parent who had all the answers and carried the weight of success and failure of his patients' health on his shoulders.

"After four years of medical school and five years post-grad work, it's easy to feel that we know how to get patients better," he says.

"We take it all on ourselves, and ignore the person themselves and the healing potential of their own bodies and minds and actions.

"Now I see that through psychoneuro immunology, the mind, body, and behavior all are linked. My role is to see how I can support people to make the physical and lifestyle changes necessary to

improve their health."

For example, he says treating a Type A person afflicted with chronic headaches and backaches means more than prescribing ibuprofen. It will require change — working less than 70 hours a week; reducing stress through learning relaxation techniques, massage, and other methods; losing weight; cutting back on alcohol and eliminating tobacco. But often, solutions are not as easy to identify.

"Sometimes, [the] best thing I can do to [is to] ask them the right questions," Purdy says, which sometimes involves reversing conventional roles.

"I use almost a Socratic approach, asking patients, 'what do you think?'.

"Basically, I ask myself 'how can I help this person live a healthier life?' and go from there," he adds.

"You have to get to know the person, look at their whole lifestyle as well as acute symptoms to try to get at the root of the problem.

"Sometimes, it takes a while to get the person to look at all sides of their life, to see what they've been neglecting."

The element of time spent with patients has altered for him as well. "I see as many patients in a week as I used to see in a day."

Usually his patients have been through the allopathic system, but are still in pain or haven't found sufficient relief. Purdy prefers this; they have had X-rays, blood tests, and other conventional work-ups, so he can concentrate on helping them find something that might help them.

But Purdy admits he can't always help people, and sometimes his approach is not for everyone. "If it helps, they will come back. If I can't help them, then I refer them to someone who might be able to.

"For certain problems, say treating headaches, there may be 15 or 20 different potential modalities that a person may or may not respond to: manipulation, body-oriented psychotherapy, craniosacral, Feldenkrais, acupuncture, meditation, biofeedback, reflexology, etc. It all depends on which one works best for that person."

Integrating therapies

Lerner concurs with Purdy and Kumar when it comes to integrated therapy.

"I try to see my role as not as the boss, not the dictator," explains Lerner. "I'm an educator and support person as much as I am a practitioner, helping patients understand the treatments they are getting.

"Solutions can be simple, and include both allopathic and homeopathic approaches. A common problem is sleep disturbance. Some medications work well, but there are also some natural approaches to improve sleep — relaxation, natural substances, even something as simple as a hot bath.

"When given a list of choices, I've found that three out of four people will choose to try the natural approach first, then we go from there."

As with Purdy, Lerner sees physical medicine and rehabilitation patients who have muscular skeletal injuries and pain problems. Also, they usually have sought other treatment and were not getting better.

"I got interested in this type of medicine because I was seeing people who were frustrated, and not satisfied with the results of standard treatment they had received," says Lerner.

"I found that acute allopathic medicine isn't great for this type of treatment. It's not as though I'm rejecting allopathic medicine, not at all. I still have my medical diagnostic hat on when I see a patient. Once we rule out any medical problem that has been misdiagnosed, then we try to give people full spectrum of services that might

Continued on next page

Alternative and Integrated Medicine Resources

Office of Complementary and Alternative Medicine, National Institutes of Health -- (301) 402-2466

"Natural Medicine, Complementary Health Care and Alternative Therapies" Web site of the Alchemical Medicine Research and Teaching Association (AMRTA): http://www.amrta.org/~amrta.

Fundamentals of Complementary and Alternative Medicine, by Marc Micozzi, MD, (Churchill Livingstone, 1996). Dr. Micozzi is executive director of the College of Physicians of Philadelphia, and also holds a PhD in anthropology. This book is available where medical text books are sold, or by calling (800) 553-5426.

American Academy of Medical Acupuncture (AAMA)
(213) 937-5514 (for physicians)
(800) 521-2263 (for patients seeking referrals to physician-acupuncturists)

Wayne State University Medical School Web site: http://www.libraries.wayne.edu/shiffman/altmed.html

Continued from previous page

benefit them."

Lerner incorporates anti-inflammatories, diet and nutrition, gentle exercise and conditioning, lifestyle modification and various types of body work — massage, physical therapy, myofascial release, manipulation, but not high velocity thrust like chiropractic.

"I do some of the manipulation myself or refer to others," he says. "We can steer people toward experts in relaxation training, guided visualization, meditation, tai chi and yoga."

Lerner says he has learned to listen to people and try to provide what they want. "We won't necessarily cure a condition," he says. "But we will suggest lifestyle and internal and external changes they can make to address the causes of physical problems."

Sharing responsibility

Both Purdy and Lerner are soft-spoken about their approach to integrated medical care; in other words, their treatments don't include a heavy dose of philosophy. As Purdy puts it, "I let my fingers do the talking."

But they both try to inject a sense of personal responsibility for patients' well-being.

"I try to get patients to listen to themselves and examine their lifestyles and choices," says Lerner.

"To do this, I have to spend more time with some patients. This is one reason why I have learned to do much of the body work and manipulations myself. This gives me a chance to know them for a half hour or hour. People tend to express more in a therapeutic environment; they tend to open up more. This enables me more of an opportunity to get to the root of their problems."

Purdy adds that to an extent, many family practitioners have been applying the same rationale to their practices for years.

"Many allopathic physicians have been dealing more with psychological and social circumstances and how they interact with patient illness. For example, when domestic violence stops, visits to the doctor go way down. Emergency room visits go down. When psycho-physiological problems are addressed and remedied, ER visits also drop, other physical manifestations like ulcers tend to diminish as well."

As Purdy spoke about how his role as a physician has evolved over the years, he touched on education, involving the patient in the decision making concerning their health, listening more so than giving orders; acting more as a guide than a boss, offering different healthy options, and enabling the patient to make his or her own choice. He agrees that this sounds like a contemporary equivalent of a primordial healer, a shaman.

"One of their [shaman] sayings is 'nature provides the cure while the healer distracts the patients.' "

--Ray Purdy, MD

"Well, I've read material on shamanism, and sometimes I feel that way with some patients," he replies.

"One of their sayings is 'nature provides the cure while the healer distracts the patients.'

"I think we do this often; sort of hand-holding, providing reassurance while nature takes its course. There certainly is something to the innate power of the body to heal itself."

Kumar says that a crucial function of the shaman was to share in the healing process, but modern medicine has supplanted that traditional role.

"Modern medicine to an extent has made practitioners invulnerable; they are hidden, so to speak, behind their white coats. They do not connect, they do not cry with their patients, they don't share their emotions, their experiences, like the shaman, but it is in this sharing that healing occurs. This shared experience, and the energy released is what healing is all about."

How do patients feel about this type of relationship with their medical practitioner?

"We find that many patients have been openly seeking this type of dialogue. Now, as more find that these types of options are available, they are beginning to demand it."

Remedies, placebos and snake-oil

Whether or not mainstream physicians agree with the alternatives therapies, it can be important for them to understand generally what many of these approaches involve.

"Patients may already be experimenting with certain complementary therapies," says Lerner. "Certain herbal medicines might interfere with prescription drugs, or vice versa."

A modicum of knowledge about alternative modalities can put an allopathic physician in a better position to at least help patients separate the well-accepted complimentary therapy from outright hokum that can be expensive or endanger health. Another indication that an unconventional purveyor is not on the level — when patients are told to avoid or disregard all allopathic medicine.

In addition, if a patient knows the physician is hostile about alternative therapies, the patient may not share any information while still attempting to try them. This can lead to misunderstandings as well as potentially jeopardize patient health.

Purdy and Lerner admit they don't know about all types of alternative therapies, and that some

seem more appealing and promising than others. But again, the recurrent theme of patients assuming part of their own health care has a positive spin, and just as there are advances in allopathic medicine that offer remedies, the same applies to complimentary therapies and natural approaches.

"There are new developments all the time in all fields of medicine," says Purdy, "particularly new therapies developed from natural substances, such as taxol for treating cancer, and Ginko biloba for treating Alzheimer's disease."

But some seem a little more "far out " than others. What about psychic healing or aromatherapy?

Though he does not use either himself, Purdy says there is plenty of evidence that there is something to these therapies.

"Perfume is a perfect example of how smell affects behavior," he says of aromatherapy. "Calvin Klein and Chanel wouldn't be making millions on it if it weren't working. Through smell you have a direct link with the limbic system, and hence directly into the brain. It can have powerful effects."

And the more metaphysical approaches, reiki therapy, crystals, etc.?

"Sure, they are further out there than others," replies Purdy. "But sometimes that's what's needed; a catalyst for a personal paradigm shift for a person, to help them change behavior. Even if it's a placebo, it still can be powerful. If it is a placebo, so what? If it helps alter the perception for the patient positive. Medical hypnosis is based on the same principle."

He adds that the effectiveness of these approaches are hard to measure, and may never lend themselves to the double-blind, placebo controlled studies that validate allopathic therapies.

For this reason, many integrated medicine proponents are calling for more outcomes related studies, according to Kumar. In addition, she says psycho-neuro immunological studies have begun producing positive data. She adds that as health care professionals, it is important to keep current on new developments — even "new" therapies that are thousands of years old.

"Still," she says, "there is plenty of snake-oil out there. You have to keep your eyes open."

Primum non nocere

Even if they are not necessarily proponents or practitioners of complimentary therapies, many allopathic physicians have come to tolerate alternatives as long as they don't hurt patients. But Purdy points out that the practice of Western medicine is not always harmless.

"Conventional medicine is based on a risk-reward ratio. There is always potential for harm," says Purdy.

"For example, the mortality rate for heart bypass surgery used to be about 5%. That was taken for granted that you would lose 5% of patients. It's now less than .5%, but still, there is a risk. We hope to do as little harm as possible, but it still happens."

When asked what advice they have for colleagues concerning integrated medical approaches, Purdy and Lerner concur: getting a feel for alternative medicine isn't going to hurt anyone, and might help.

"Treat yourself as an experiment," suggests Lerner.

"Out of curiosity, see a massage therapist or acupuncturist. See what it's like.

Photo by John Walton

Snake-oil or effective treatment? Dr. Munyon's Home Remedies from the turn of the century, property of the SMS Foundation, promised cures for everything from crying baby syndrome to Whooping Cough.

Also, there is a lot of good philosophical material available about treating people with serious disease; Norman Cousins, Bernie Siegal.

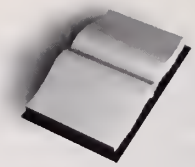
"For your patients' sake, you might want to get a feel for what these people are doing concerning confronting illness and facing mortality."

Kumar is even more emphatic. "To be a good scientist, you need to be open. You can't throw something out without looking at it critically," she advises.

"We're all on the same side, we all want to take care of patients the best we can. It is our responsibility to learn all we can about ways to enhance the lives of our patients, to offer them informed choices.

" We need to be open. When we close our minds, we stop growing."❖

Glossary of Terms for Alternative and Complementary Medicine



Accupressure. Similar to acupuncture, but using finger pressure rather than fine needles on specific points along the body to treat ailments such as tension and stress, aches and pains, menstrual cramps, arthritis.

Acupuncture. Fine needles are inserted at specific points to stimulate, disperse, and regulate the flow of vital energy, and restore a healthy energy balance. In addition to pain relief, acupuncture is also used to improve well-being and treat acute, chronic, and degenerative conditions in children and adults.

Aromatherapy. Using "essential oils" distilled from plants, aromatherapy treats emotional disorders such as stress and anxiety as well as a wide range of other ailments. Oils are massaged into the skin in diluted form, inhaled, or placed in baths. Aromatherapy is often used in conjunction with massage therapy, acupuncture, reflexology, herbology, chiropractic, and other holistic treatments.

Ayurvedic Medicine. Practiced in India for more than 5,000 years, ayurvedic tradition holds that illness is a state of imbalance among the body's systems that can be detected through such diagnostic procedures as reading the pulse and observing the tongue. Nutrition counseling, massage, natural medications, meditation, and other modalities are used to address a broad spectrum of ailments.

Biofeedback. A method of monitoring minute metabolic changes in one's own body with the aid of sensitive machines. The technique is used especially for stress-related conditions such as asthma, migraines, insomnia, and high blood pressure. Clients learn to make subtle adjustments to move toward a more balanced internal state by consciously visualizing, relaxing, or imagining while observing light, sound, or metered feedback.

Chelation Therapy. Chelation therapy is a series of intravenous injections of the synthetic amino aid EDTA, designed to detoxify the body. It is also often used to treat arteriosclerosis. Most frequently, this is administered in an osteopathic or medical doctor's office. (This therapy has drawn criticism from medical boards around the country).

Chinese (Oriental) Medicine. Oriental medical practitioners are trained to use a variety of ancient and modern therapeutic methods -- including acupuncture, herbal medicine, massage, heat therapy, and nutritional and lifestyle counseling -- to treat a broad range of both chronic and acute illnesses.

Chiropractic. The chiropractic views the spine as the backbone of human health: misalignments of the vertebrae caused by poor posture or trauma cause pressure on the spinal nerve roots, leading to diminished function and illness. Through manipulation or adjustment of the spine, treatment seeks to analyze and correct these misalignments.

Craniosacral Therapy. This is a manual therapeutic procedure for remedying distortions in the structure and function of the craniosacral mechanism -- the brain and spinal cord, the bones of the skull, the sacrum, and interconnected membranes. It is used to treat chronic pain, migraine headaches, TMJ, and a range of other conditions.

Feldenkrais. A form of movement therapy designed to isolate separate muscles and muscle groups to promote flexibility, release tension and enhance balance.

Herbalism. An ancient form of healing still widely used in much of the world, herbalism uses natural plants or plant-based substances to treat a range of illnesses and to enhance the functioning of the body's systems. Though herbalism is not a licensed professional modality in the United States, herbs are "prescribed" by a range of practitioners.

Holistic Medicine. A descriptive term for a healing philosophy that views a patient as a whole person, not as just a disease or a collection of symptoms. In the course of treatment, holistic medical practitioners may address a client's emotional and spiritual dimensions as well as the nutritional, environmental, and lifestyle factors that may contribute to an illness. Many holistic medical practitioners combine conventional forms of treatment with natural or alternative treatments.

Homeopathy. A medical system that uses infinitesimal doses of natural substances -- called remedies -- to stimulate a person's immune and defense system. A remedy is individually chosen for a sick person based on its capacity to cause, if given in overdose, physical and psychological symptoms similar to those a patient is experiencing. Common conditions homeopathy addresses are infant and childhood diseases, infections, fatigue, allergies, and chronic illnesses such as arthritis.

Kinesiology. The study of muscles and movements. Practitioners analyze muscle function, posture, gait, and other structural factors in addition to inquiring about lifestyle factors that may be contributing to a health-related problem.

Nutritional supplements, muscle and joint manipulation, and lifestyle modification may then be used as part of a treatment plan. Applied kinesiology is used by health-care providers who are licensed to diagnose, such as chiropractors, osteopaths, dentists, and medical doctors.

Massage, Therapeutic. A general term for a range of therapeutic approaches with roots in both Eastern and Western cultures. It involves the practice of manipulating a person's muscles and other soft tissue with the intent of improving a person's well-being or health, and may include, but not be limited to, deep tissue, percussion, vibration, and joint movement.

Native American Herbology. Native American healers and spiritual leaders seldom travel far from their homes and even more infrequently publicize their work -- it is not the way. However, there is a body of knowledge about the herbal treatments used by various Native People. Much of the information has been tested and incorporated into our present herbal therapies.

Naturopathic Medicine. Naturopathic physicians work to restore and support the body's own healing abilities using a variety of modalities including nutrition, herbal medicine, homeopathic medicine, and orient medicine. A primary health-care system emphasizes the curative power of nature, treating both acute and chronic illnesses in all age groups.

Reflexology. This modality is based on the idea that specific points on the feet and hands correspond with organs and tissues throughout the body. With fingers and thumbs, the practitioner applies pressure to these points to treat a wide range of stress-related illnesses.

A Guide for Patients Approaching Alternative Therapies

The NIH Office of Complementary and Alternative Medicine recommends the following before getting involved in any alternative therapy:

- Obtain objective information about the therapy. Besides talking with the person promoting the approach, speak with people who have gone through the treatment – preferably both those who were treated recently and those treated in the past. Ask about the advantages and disadvantages, risks, side effects, costs, results, and over what time span results can be expected.
- Inquire about the training and expertise of the person administering the treatment (for example, certifications).
- Consider the costs. Alternative treatments may not be reimbursable by health insurance.
- Discuss all treatments with your primary care provider who needs this information in order to have a complete picture of your treatment plan.
- Be open-minded but don't blindly accept claims such as:
  - the product works by a secret formula;
  - the product's publicity is limited to the back pages of magazines, telephone solicitations, direct mail, newspaper ads in the format of news stories, or infomercials on television;
  - the product is an amazing or miraculous breakthrough;
  - promises of easy weight loss;
  - promises of a quick, painless, guaranteed cure;
  - testimonials from satisfied customers who are probably paid representatives.

Reiki Therapy. Practitioners of this ancient Tibetan healing system use light hand placements to channel healing energies to the recipient. While practitioners may vary widely in technique and philosophy, Reiki is commonly used to treat emotional and mental distress as well as chronic and acute physical problems, and to assist the recipient in achieving spiritual focus and clarity.

Rolfing. A massage technique using deep manipulation of the fascia (connective tissue) to restore the body's natural alignment, which may have become rigid through injury, emotional trauma, and inefficient movement habits. The process involves ten sessions, each focusing on a different part of the body.

Shiatsu. The most widely known form of accupressure, shiatsu has been used in Japan for more than 1,000 years to treat pain and illness and for general health maintenance. Using a series of techniques, practitioners apply rhythmic finger pressure at specific points on the body to stimulate chi, or the vital energy.

Wellness Restoration. A comprehensive program designed to increase muscle mass by using adequate nutrition, supplementation, anabolic steroid therapy and resistance weight training to prevent or reverse wasting in HIV disease.

Yoga Therapy. The use of yoga to address mental and physical problems while integrating body and mind. ❖

Herbal Treatments Find Their Way Into Mainstream America

by Jeremy Pittenger, contributing editor

WATCH OUT WALGREENS, move over Super$_x$, there's a new pharmacy coming to a block near you. It's the alternative pharmacy and it's found in communities all across the country and around Wisconsin. It's staffed by trained, licensed pharmacists, and patients can fill their prescriptions there, but it offers more. Not over-the-counter drugs, but "natural" drugs. Herbal remedies, aromatherapies and homeopathic tinctures are all offered in a growing number of specialized "pharmacies." **(See related story, *An Ancient Heritage Beckons Pharmacists*, page 32.)**

Community Pharmacy, Madison, specializes in herbal remedies, filling prescriptions from traditional and complementary medicine practitioners.

According to the latest data, whether or not physicians are exposed to alternative medicines and treatments in greater numbers, more of your patients will be seeking alternative pharmacies to find help for both common and rare medical conditions ranging from insomnia to cancer.

Herbal medicines are attractive to patients for many reasons. But the problem, according to pharmacists such as Tom Wepser of the Medicine Shop in Marshfield, is that the sale and manufacture of such drugs are not regulated. Therefore, you have companies claiming that their products are "100% natural" which they might very well be, but the active ingredients may vary tremendously from brand to brand.

"You don't know what you're getting because no standards are being set by the FDA," says Wepser.

Peter Kiesch, pharmacist with Community Pharmacy in Madison, agrees. He says that herbal medicines, like any prescription medication, affect different people differently.

"It's important to realize that as far as herbal remedies go, what works for one person may not necessarily work for another. You have to learn to individualize with herbal drugs."

Ann Stanger, MD, believes that herbal medicines can provide relief with fewer side effects than traditional prescription drugs. For her, that's a powerful motivator.

"The advantages [of herbal medicines] are that they are less toxic and have fewer side effects. They are also more gentle in action. They tend to work with the body instead of against it.

"The disadvantages are that they are not well controlled. The dosages vary widely."

Stanger says her patients usually bring the subject of herbal remedies up to her. Occasionally, when she sees someone with a viral upper respiratory infection, she may suggest a natural remedy to suppress the symptoms, since that's all that can be done.

Unfortunately, Stanger feels that herbal medicines can be downright overwhelming for many physicians who simply do not have the time to learn about this other realm of treatment.

"I think most doctors recognize that there is much more out there, but they are just not interested in learning more [because of the time considerations].

"I would love to see more articles and studies published in more traditional medical journals."

Stanger, like Wepser and Kiesch, is concerned about self diagnosis and treatment. Kiesch points out that he never encourages people to self-medicate without consulting a physician, "especially if symptoms persist."

Stanger recognizes that self-treatment is a concern, but also feels that the medical profession is

set up to discourage herbal drug usage. "Right now," Stanger says, "a patient must see a doctor for treatment. If that is not the case, and people can take it upon themselves to diagnose and treat, the financial incentive for physicians may be lost. That can be a frightening thought for physicians."

Stanger became interested in herbal treatments because of her own upbringing. Her mother served the family herbal remedies such as brewer's yeast, and Stanger participated in a macrobiotic diet in college.

"It was during my residency that I became uncomfortable [with what I could offer patients] and felt like there was something missing, so I started pursuing alternative medicines."

Cancer creates an open mind

Howard Bailey, MD, with the UW Comprehensive Cancer Center, believes that cancer patients and their physicians are more open about trying unproven remedies.

"In the oncology field," Bailey says, "we are open to just about anything. People are searching all over the world for solutions. What's vogue now could be mainstream tomorrow."

Bailey believes that there are many naturally-occurring substances that are having success in treating cancers and reducing tumor growth such as adriamycin, vincristine, and taxol, derived from the Western Yew Tree. But, he cautions, "Many people are well-intentioned and may be right when they are self-treating. However, I only tell patients about what I know that's proven to work."

Both Bailey and George Wilding, MD, oncologist with UW Hospital and leader of the experimental therapeutics program at the UW Comprehensive Cancer Center, believe that herbal medicines can be both positive and negative, but in any case, patients are getting them and "doctors need to know about them."

"Doctors should have some sense in their areas of what their patients are doing to heal themselves," comments Bailey. "It's important to know what's out there, especially if patients are taking it."

"It's better to know about the drugs and to not reprimand patients about using them," he says. "Such an attitude will make a patient less likely to share any more about what they are doing with their physician.

"In the oncology field we are open to just about anything... What's vogue now could be mainstream tomorrow."

--Howard Bailey, MD

"Besides, I would think a doctor would want to hear about the medicines that are working."

"I usually ask my patients right away if they are taking any herbal drugs when I am diagnosing so I can better understand different bodily reactions," says Wilding. "But, I don't prescribe herbal medicines."

That said, he does acknowledge that many widely used prescription drugs today had their origin in plants. "Pharmaceutical companies have derived most of their treatments from natural products and this trend will continue as work on these plant-derived drugs continues."

Some of the most common examples of drugs currently being tested include: perillyl alcohol, from lavender flower oil; genistene, derived from bean curds and is currently being looked at for trials in use against prostate cancer; retinoid vitamin used for kidney cancer; shark cartilage, which promotes blood vessel growth; etc.

Yet, herbal drugs remain controversial because there's just not enough testing taking place. As Wilding comments, "I read more about herbal medicines in the lay press than I do in the scientific journals."

And Bailey acknowledges that until these medicines are scrutinized in a sound scientific manner, not a lot will be known about them uniformly.

"I think it's accurate that doctors are skeptical about herbal drugs. I tend to have a liberal view. I know I don't have all the answers and I don't stop my patients from looking into other things. However, I won't recommend it unless there is documented proof that it works.

"Most alternative medicines don't do anything at all. People are free to choose what they want to do though; I don't have a right to stop them from looking for alternatives.

"I would encourage these patients to share what they're doing with their physicians, and urge physicians to be open and receptive.

"Whether or not physicians like it, people are and will continue to use alternative medicines. We must learn from this."❖

An Ancient Heritage Beckons Pharmacists*

Dwight A. Vance, RPh, Drug Information Specialist and Hospice Consultant, Tulsa, OK

The pharmacist able to communicate information about herbal medicines provides a much-needed service to the public. Herbal medicines symbolize the past and present. Their use is ubiquitous and provides a marvelous opportunity for pharmacists to reinforce themselves as a primary source of drug information. Over the last 20 to 30 years, herbs and other natural substances used as medicines have left the pharmacy and migrated to the health food store. Since there is often no pharmacist involved, the public may have difficulty in accessing appropriate information. Because of marketing and regulatory issues, readily available information is usually provided by books, newsletters, and store clerks, who may lack training and credentials. The public is often at the mercy of misinformation, some of which may be downright dangerous. Unfortunately, pharmacists are not always able to discuss the issues. Pharmacists willing to correct this public health deficit need to fulfill their ancestral heritage and strive to maintain their position as a comprehensive source of authoritative drug information.

Herbs used as medicine, i.e., "herbal medicine," is only one of seven categories of alternative medicine as determined by the NIH Office of Alternative Medicine. The other six are: diet/nutrition/lifestyle changes, mind/body interventions, alternative systems, bioelectromagnetics, applications in medicine, natural healing methods, and pharmacological and biological treatments.

Health care professionals and patients alike are seeking the truth about herbs and food supplements used as medicines. Perhaps the large number of people without health insurance and the high cost of medical care are two main reasons for the public's quest for alternative medicines.

Another compelling reason for the widespread interest in alternative medicines probably relates to the many different cultures found in the United States. Native Americans, Latin Americans, Chinese and Japanese Americans, and others have treasures of traditional remedies (O'Brien J. *The role of the pharmacist in alternative medicine: Focus on herbal products and homeopathic remedies.* American Pharmacological Association Policy Committee Background paper, 1996-1997, unpublished).

Whatever the reasons, when patients seek traditional medical care, the physician and pharmacist may be confronted with the need to evaluate a basket full of alternative medicines which general a lot of questions.

Issues

Questions arise because of concerns about product identity, intended use, toxicity, efficacy, lack of efficacy, interactions, cost, suitability, standardization, adulterants, and lack or delay of appropriate medical care. In a landmark study of unconventional medicine in the United States conducted by Eisenberg and colleagues[1] and published in the *New England Journal of Medicine*, January 28, 1993, it was found that, "72 percent of respondents who used unconventional therapy did not inform their medical doctor that they had done so." This reason alone supports the notion that pharmacists should strive to address this public health need and reinforce their ancestral role of medication advisor.

Health professionals should consider the following comments when thinking about herbal medicines and wondering what to tell concerned patients about their "natural" medicines. Bear in mind that many patients do not understand the true meanings of the terms natural and synthetic and are easily confused by them.

Counseling considerations

Although many herbs may have been used for centuries, scientific data on their effectiveness and safety may be lacking. However, the absence of scientific study does not necessarily imply lack of efficacy.

- Advertising is often misleading and may be based upon unsubstantiated testimonial claims.
- Herbal treatments are not substitutes for appropriate medical care, especially when dealing with HIV, cancer, self-diagnosed heart disease or other serious conditions.
- Quality and standardization of herbal products are often lacking. Signs of good quality such as sealed containers offering protection from light, easily read and complete labels showing ingredients, proper names and amounts, manufacturer name and address with telephone support numbers, expiration dates, and lot numbers are good indicators that you are dealing with a reputable manufacturer.
- Pregnant women, lactating mothers, infants and young children are probably not candidates for herbal treatments.
- Herbal medicines shouldn't be confused with homeopathy. Homeopathy uses plant drugs, administered in nontherapeutic dosages, unlike herbal medicines which are used in therapeutic dosages.
- Consideration should be given to the quality, reliability and appro

priateness of information resources.

Herbs and hospice

Hospice patients in particular may be heavily involved in unconventional therapies including herbal medications. Hospice care providers should be encouraged to ask their patients in a nonthreatening way if they are taking health food supplements or herbal medications. A good leading question to ask might be to inquire if they shop in a health food store.

Pharmacists interested in hospice care are in a position to recommend a variety of adjunctive medications suitable for palliative care: melatonin for use as a sleep aid, ginger as an antiemetic, saw palmetto for benign prostatic hypertrophy, various fiber products for management of opiate-induced constipation, and garlic for lipid reduction are some examples.

Although only testimonial in nature, asking for feedback from hospice workers, along with direct patient observation when possible, will help determine which products and dosages seem to provide the best outcomes.

Hospice pharmacists can also work closely with dietitians to help ensure that nutritional factors influenced by medications are positive and not detrimental to the patient. Since hospice patients are often taking dozens of medications, the identification, evaluation and management of the many possible interactions is a monumental challenge.

Pharmacists can also use their compounding skills to prepare suitable dosage forms of medications for patients unable to utilize commercially available dosage forms.

Herbs -- A well-established trend

Herbal medicines are here to stay. People are going to continue to avail themselves of the use of herbal medicines. Remember that the placebo effect is real and that people anticipate results when they spend their money for largely self-directed care. Note that annual sales for herbal products exceed $1.2 billion in the United States. It should be no surprise that Congress received more protest mail in 1993 over the Food and Drug Administration's attempt to remove herbal products than for any other issue since the Vietnam War. The herbal outcry resulted in the Dietary Supplement Health and Education Act of 1994.

Key components of the Dietary Supplement Health Education Act of 1994 Herbs or phytochemicals may be sold as dietary supplements as long as therapeutic claims are not specified on their labels.

- The FDA must prove that a botanical is unsafe before it can be removed from the market.
- The label may describe the effects on the structure or function in humans.
- Literature presenting a balanced view of the available scientific information may be presented with the product.

The herbal twilight zone

Many of the available herbal medicines have been used for centuries and do not qualify for patent protection.

Thus, when faced with the estimated $231 million and 12-year development cost required for FDA approval, herbal manufacturers are not inclined to conduct scientifically valid clinical studies, which explains why only a few herbal products have FDA approval.

Some examples of herbal medicines with FDA approval include cascara, senna and psyllium seed. Interestingly, about 250 herbal medicines with monographs in official compendia years ago have not vanished, but have simply found their way to the health food store and many pharmacies, where they may be sold as food supplements, with no prescription required. Herbal products appear to have been placed in a regulatory twilight zone as neither a food nor a drug.

The best available information concerning herbal medicines is found in the German medical and pharmaceutical literature. Monographs have been developed and published on roughly 300 herbs, about 200 of which were found to have reasonable efficacy and low toxicity. Even with a limited source of monographs, there are still many problems. Herbal products used as medications have not been through the FDA approval process and thus are sold as dietary supplements. Dosages are often unpredictable, and considerations are difficult to determine since there is little standardization.

Also, many herbal medicines may be prepared by a variety of methods producing teas, tinctures, tablets, capsules, powders and other dosage forms, all of which may dramatically influence efficacy, toxicity and dosage. Long-term use of herbal medicine has not been well studied. Patients should be reminded that herbal medications may or may not be physiologically active and thus should be discussed thoroughly with their physician and pharmacist.

Tyler, in his article, "What Pharmacists Should Know About Herbal Remedies"[2] has offered a partial listing of herbs considered safe/effective by non-US regulatory authorities and a partial list of those considered unsafe.

Those listed as safe include chamomile (German), echinacea, feverfew, garlic, ginger, ginko, saw palmetto, valerian and ginsing.

Those listed as unsafe or possessing other problems include borage, calmus, chaparral, coltsfoot, comfrey, ephedra (mahuang), germander, licorice, life root, pokeroot and sassafras.

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Resources

Pharmacists wishing to further their education in the area of herbal medicines should consider the following resources. Also, the Internet provides a huge source of information on alternative therapies. However, patients and health professionals alike should exercise caution about the validity and quality of the information found and consider the appropriateness of the source.

- Herbs and phytomedicines - The American Botanical Council and the Texas Pharmacy Foundation; Post Office Box 201660; Austin, TX 78720-2660; 512-331-8868.
- National and state pharmacy organizations.
- Bisset NG (ed.). Herbal Drugs and Phytopharmaceuticals; A Handbook for Practice on a Scientific Basis; Medpharm Scientific Publishers, 1994, CRC Press.
- HerbalGram. A quarterly journal published by the American Botanical Council and the Herb Research Foundation.
- The Lawrence Review of Natural Products. Facts and Comparisons.111 West Port Plaza, Suite 300, St. Louis, MO 63145-3098, 314-878-2515.
- Murray MT. Natural Alternatives to Over-the Counter and Prescription Drugs. William Morrow and Company, Inc.; 1350 Avenue of the Americas; New York, NY 10019.
- The German Commission E Monographs. American Botanical Council.

References

1. Eisenberg DM. Unconventional medicine in the United States. *N Engl J Med* 1993;328:246-252.
2. Tyler VE. What pharmacists should know about herbal remedies. *J Am Pharm Assoc* 1996; NS36:29-37.

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Magnetic Therapy is Ineffective for the Treatment of Snoring and Obstructive Sleep Apnea Syndrome

Donn Dexter, Jr., MD, Eau Claire

Abstract
Snoring and the obstructive sleep apnea syndrome are common and chronic ailments with potentially serious medical complications. There are several accepted treatments, but these can be uncomfortable, inconvenient, and expensive. A number of alternative treatments have been reported to be beneficial in the treatment of obstructive sleep apnea and snoring. They are advertised in magazines, on the radio and television, and on the Internet. The lay press is reporting about the effectiveness of these treatments without the benefit of clinical trials or scientific studies.

Among the therapies currently being promoted for the treatment of snoring and sleep apnea is biomagnetic therapy. Unlike many of the other treatments which have not undergone scientific evaluation, biomagnetic therapy has been evaluated in the past. In fact, the evaluation of biomagnetic therapy is one of the first controlled scientific investigations found in the literature. This report showed that magnet therapy had no medicinal value. Despite this clear evidence, magnetic therapy continues to be utilized today and currently is being promoted for the treatment of snoring and sleep apnea.

At our Sleep Disorder Center, we have had the opportunity to evaluate a patient with severe obstructive sleep apnea both before and after treatment with magnetic therapy, as well as with conventional therapy. Our study clearly indicates there was no benefit from magnetic therapy in this case.

While alternative therapy may be helpful in the treatment of certain medical conditions, extreme care must be exercised to prevent inappropriate treatment or undertreat-ment of significant medical problems. Close clinical follow-up and controlled studies are important in determining the effectiveness of therapies.

Donn Dexter, Jr., MD, is a neurologist and sleep disorders specialist at Luther/Midelfort Mayo Health System, Eau Claire, Wisconsin. He is co-director of the Sleep Disorders Center.

Introduction
Medical interest in disorders of sleep is relatively new and rapidly growing. In recent years, the number of sleep disorder clinics has reached nearly 1,500 with approximately 325 sleep disorder centers or laboratories being accredited by the American Sleep Disorders Association. Sleep medicine is now routinely taught in medical schools, and the AMA has recognized sleep medicine as a self-designated specialty. Corresponding to this growth and scientific interest in sleep and sleep medicine has been an increased interest in the lay press and among alterative health care providers.

Among the most common disorders of sleep is snoring. Snoring is noted in 25% of all men and this frequency increases to 60% of men between the ages of 40 - 65. While snoring often is only a problem for the bed partner or in certain social situations, it can, be severe enough to disrupt sleep and may cause severe social isolation.

Obstructive sleep apnea syndrome is a potentially serious medical condition which is often associated with snoring. In the obstructive sleep apnea syndrome, recurrent obstructive events in the upper airway result in oxygen desaturation, disrupted sleep, and significant excessive daytime somnolence. Untreated obstructive sleep apnea syndrome doubles the risk of dying in a motor vehicle accident and increases the risk of heart attack and stroke by four to five times. Obstructive sleep apnea syndrome is also quite common, occurring in approximately 4% of the adult population with much

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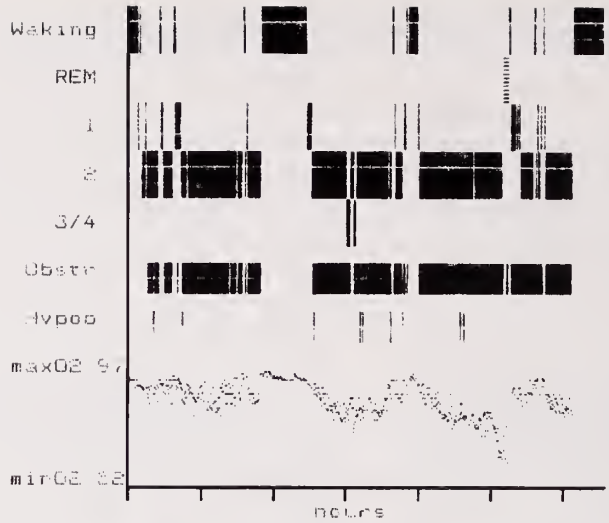

Fig 1. Polysomnogram R/O OSA. Study length: 393 mins. Sleep time: 296 mins. Sleep efficiency: 75%. Awake: 25%. Stage 1: 8%. Stage 2: 65%. Stage 3/4: 1%. REM: 1%. Obstructive apneas: 403. Central apneas: 0. Hypopneas: 10. Longest apnea: 50 secs. pg. 858. Apnea Index: 67. RDI: 68. Diagnostic polysomnogram with sleep stages, disturbed breathing events and oxygen saturation displayed over time. This graph is consistent with severe obstructive sleep apnea syndrome.
REM = Rapid eye movement stage of sleep.
RDI = Respiratory distress index (apneas +hypopneas/hour)

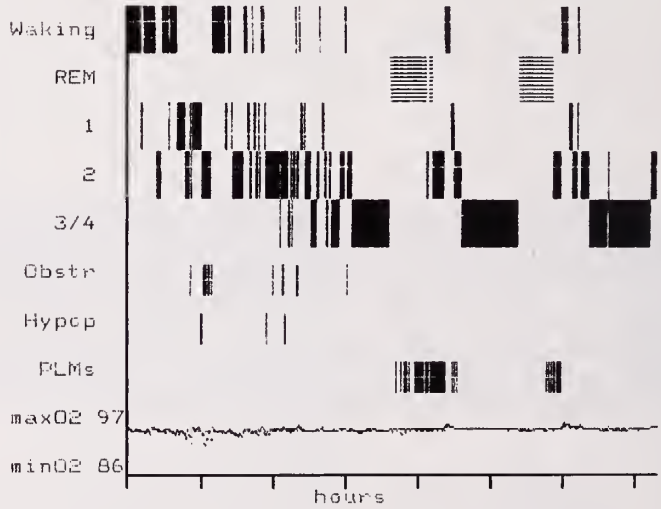

Fig 2. Polysomnogram CPAP. Study length: 438 mins. Sleep time: 368 mins. Sleep efficiency: 84%. Awake: 16%. Stage 1: 10%. Stage 2: 26%. Stage 3/4: 33%. REM: 15%. Obstructive apneas: 16. Central apneas: 0. Hypopneas: 5. Longest apnea: 27 secs. pg. 753. Apnea Index: 2. RDI: 3. Therapeutic polysomnogram with patient on nasal continuous positive airway pressure titrated up to 10 cm water pressure. This shows good response with improved sleep continuity, higher O_2 saturations and REM/slow wave sleep rebound.

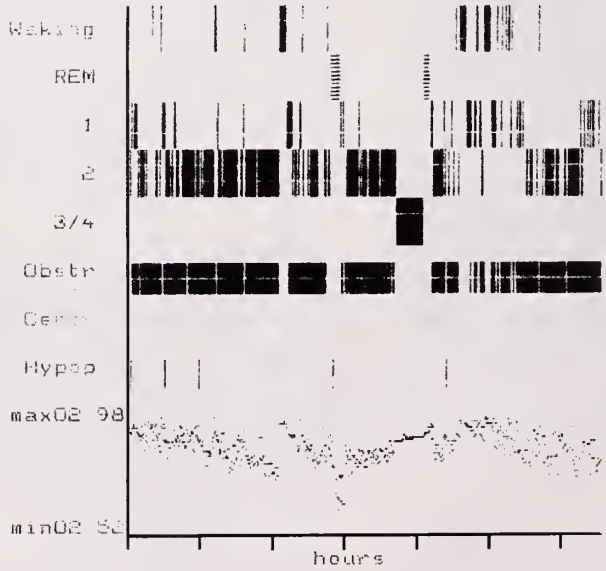

Fig 3. Polysomnogram with magnetic pillows/mattress pad. Study length: 393 mins. Sleep time: 329 mins. Sleep efficience: 84%. Awake: 16%. Stage 1: 21%. Stage 2: 54%. Stage 3/4: 6%. REM: 3%. Obstructive apneas: 410. Central apneas: 1. Hypopneas: 5. Longest apnea: 105 secs. pg. 1084. Apnea Index: 68. RDI: 69. Therapeutic polysomnogram utilizing magnetic pillow and mattress pad. This study is essentially unchanged from the previous diagnostic study showing severe obstructive sleep apnea syndrome.

higher prevalence in older males, the obese, and very loud snorers.

There are a number of very effective treatments for both snoring and obstructive sleep apnea syndrome, which have been rigorously studied and reported on in peer-reviewed journals. Standards of care exist for the use of many of these treatments. Among treatment options for snoring and obstructive sleep apnea include oral appliances, nasal continuous positive airway pressure (CPAP) and surgical treatments. Despite their high degree of effectiveness, they can be uncomfortable and expensive.

Alternative medicine therapies have been widely promoted for the treatment of snoring and apnea.[1,2] Some of these treatments include the Breathe Right Nasal Strip® and snoring pillows, which may have limited effectiveness for snoring. No clear studies of their effectiveness in sleep apnea are found in the literature. Other treatments including Snore-No-More tablets or drops and magnetic therapy are promoted without any evidence in the scientific literature of their effectiveness.

Magnetic therapy has a long and controversial history in the treatment of medical conditions.[3,4] Magnetic therapy was reported in medieval times and was popularized in the mid-eighteenth century by Anton Mesmer. Mesmer was discredited in the late 18th Century by a group of scientists including Benjamin Franklin, Lavoisier and Guillotin. Their report, commissioned by the King of France, was one of the first studies to utilize true scientific investigation techniques. Despite this thorough and scientific discrediting of magnetic therapy, it has persisted over the years in the United States. In this region, magnetic therapy is being provided by chiropractors and non-licensed alternative healers. It is being promoted locally and at national sleep meetings by Nikken, Incorporated.

We were able to study a patient with obstructive sleep apnea syndrome and snoring at our clinic who received treatment with magnetic therapy.

Case Report

A 60-year-old woman was seen in the Sleep Disorders Center for severe excessive somnolence and loud snoring. She had a clinical history consistent with obstructive sleep apnea syndrome, and her examination was remarkable for hypertension and mild retrognathia. She was referred for formal polysomnography, which revealed severe obstructive sleep apnea syndrome with a respiratory disturbance index (RDI-the number of disturbed breathing episodes per hour) of 68 with oxyhemoglobin desaturations to as low as 52% (Figure 1). Nasal continuous positive airway pressure (CPAP) was utilized and was dramatically effective in controlling the disturbed breathing and snoring (Figure 2). The patient found the nasal CPAP to be uncomfortable and discontinued its use.

She had been contacted by a neighbor who was selling magnetic pillows and mattress pads from Nikken, Inc., and the neighbor informed the patient that these were effective in controlling both snoring and apnea. The patient utilized the magnetic pillow and mattress pad (total cost approximately $1,100) and reported to our office that these were dramatically effective in controlling her apnea and snoring. Concerns regarding lack of effectiveness of this type of therapy led to the patient being restudied at no charge in our laboratory while utilizing the magnetic pillow and mattress pad. Formal polysomnography utilizing her magnetic therapies showed essentially no change from her pretreatment study with severe obstructive sleep apnea, again with desaturations to the low fifties and a respiratory disturbance index of 69 (Figure 3). When the evidence of her continued severe sleep problem was reviewed with the patient, she admitted that the magnetic therapy really did not seem to be helping her but she was very hopeful that it would and did not want to upset her friend who was her therapy provider. The patient subsequently went back on nasal CPAP and has done well in follow-up over the course of nine months without any recurrence of snoring or apnea. She is much more alert during the day and her blood pressure, which was previously elevated, has normalized without additional therapy.

Discussion

Sleep disorders can be serious medical problems requiring proper evaluation and treatment. While certain alternative therapies may alleviate a number of medical conditions, their effectiveness must be proven in a formal, scientific fashion. It is imperative that patients be asked about their use of alternative therapies and when these are encountered, they be studied for effectiveness. Failure to do so may result in significant undertreatment of serious medical problems.

Acknowledgment

I would like to thank Bobbi Fleming for assistance and manuscript preparation.

References

1. Lovin CB. Help for Snorers and Those Who Love Them. *Good Housekeeping*,Oct 96;152.
2. Powers P. Using the Force. *Eau Claire Leader Telegram*;7/2/95.
3. Franklin B, Lavoisier A, et al. Testing the Claims of Mesmerism. Reprinted in *Skeptic*;4(3)1996:66-83.
4. Macklis RM. Magnetic Healing, Quackery and the Debate About the Health Effects of Electromagnetic Fields. *Annals Int Med*;118(5):376-83.

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Acute Pulmonary Edema Caused by Ingestion of Hydrochlorothiazide

Craig C. Young, MD, Milwaukee; James L. Kyle, MD and Roy T. Young, MD, Los Angeles

Abstract

Hydrochlorothiazide is one of most commonly prescribed antihypertensive diuretics. In this case, an allergic reaction to hydrochlorothiazide resulted in severe pulmonary edema.

Hydrochlorothiazide, one of the most commonly prescribed drugs,[1] is a diuretic which is usually well tolerated. Common side effects include dizziness, weakness, fatigue, and cramps. These side effects are usually caused by fluid and electrolyte imbalances.[2] Acute pulmonary edema, first reported by Steinberg in 1968,[3] is a rare but potentially life-threatening allergic reaction to hydrochlorothiazide. This case illustrates many of the typical presenting features of the reaction.

Case Report

A 50 year-old woman took 50 mg of hydrochlorothiazide prescribed by her previous physician for intermittent lower extremity edema. Within 90 minutes of taking the hydrochlorothiazide, she developed dry cough, progressive shortness of breath, chest pain, diaphoresis, wheezing, nausea and vomiting. She was admitted to a local hospital for a possible myocardial infarction, which later was ruled out by serial electro-cardiograms (EKGs) and normal cardiac enzyme values. A pulmonary embolus was ruled out by normal ventilation and perfusion lung scans. Her symptoms cleared so rapidly that no etiology was found for her pulmonary edema. She was discharged with the diagnosis of "anxiety-related episode."

Two weeks later, she took another 50 mg of hydrochlorothiazide and, in a similar 90 minute time span, developed pleuritic chest pain, diaphoresis, shortness of breath, wheezing, a non-productive cough, copious clear rhinitis, weakness, nausea and vomiting. The patient called paramedics who administered sublingual nitroglycerin and lidocaine 75 mg without relief of her chest pain and transported her to the medical center.

Admission medical history was remarkable only for an episode of thrombo-phlebitis in 1964. The patient had no history of lung or heart disease. Her medications on admission were conjugated estrogens (Premarin) 0.625 mg once a day, phendimetrazine tartrate (Plegine) 35 mg before bedtime three times a week and aspirin 325 mg once a day. The patient stated that she had quit smoking 23 years previously and drank only an occasional glass of wine. She used no other drugs or medications.

On presentation to the emergency room her blood pressure was 100/70 mm Hg with a regular pulse of 104/min and a respiratory rate of 30/min. She was afebrile. She had no jugular venous distention. Her lungs had bibasilar fine crackles. Heart exam was normal with no extra heart sounds, murmurs or rubs. The abdominal exam was unremarkable. Examination of her extremities revealed no calf tenderness or edema.

Laboratory data included a normal hematocrit and platelet count with two nucleated red blood cells per 100 white blood cells and slight toxic granulation noted on the peripheral smear. The white cell count was 4600 per cu mm with 33% neutrophils, 41% band neutrophils, 24% lymphocytes, 1% monocytes and 1% metamyelo-cytes. Prothrombin time, activated partial thromboplastin time, blood urea nitrogen, and serum creatinine were within normal limits. The serum potassium was slightly low at 3.4 mmol/L. Serum glucose was slightly elevated to 145 mg/dL. An EKG was unremarkable. Chest X-ray showed increased interstitial markings without cardiomegaly. Arterial blood gases at an inspired O_2 of 6 LPM were a pH of 7.52, pCO_2 of 32 mm Hg, pO_2 of 134 mm Hg, bicarbonate of 26.4 mmol/L and an O_2 saturation of 98.9%.

The patient was admitted to the hospital for observation and cardiac monitoring with the diagnosis of acute pulmonary edema and possible myocardial infarction. During the hospitalization, a myocardial infarction was ruled out by normal EKG and enzymes. At this point, the patient was diagnosed as having an allergic reaction to hydro-chlorothiazide. The patient was discharged with instructions to destroy her remaining hydrochlorothiazide and to return in four weeks for follow-up. Three months later when she was contacted by telephone, she reported that during this interval she had again taken "a small fragment of a broken pill" for ankle swelling. She again a developed dry cough, progressive shortness of breath, chest pain, diaphoresis, wheezing, nausea and vomiting. She decided not seek medical treatment at that time although she did destroy the remaining hydrochlorothiazide.

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Discussion

Since 1968, when Steinberg first described two cases of pulmonary edema in response to the ingestion of hydrochlorothiazide, 22 cases have been reported worldwide.[3-19] In eight cases the hydrochlorothiazide was prescribed for hypertension, in five cases for lower extremity edema and in the remaining cases the reason for prescribing hydrochlorothiazide was not listed. Patients included 17 women and two men with an average age of 56.5 years (range 32 - 74 years old). Six patients experienced the reaction upon taking the drug for the first time, 10 patients after a drug free interval of at least two months following previous use of the drug.

The diagnosis of a hydrochlorothiazide reaction as the cause of the pulmonary edema was made on initial presentation in only five of the cases. Overall the average time from presentation to diagnosis was 5.5 weeks. Six patients required ventilator support and five patients received Swan-Ganz catheterization.

The mechanism of the reaction is not known. Investigators have proposed hypotheses including idiosyncratic reaction,[4,5] endothelial vasculature pulmonary injury,[6] anaphylactic response,[3,6] and cell mediated hypersensitivity reactions.[7] In two cases controlled challenges to hydrochlorothiazide resulted in pulmonary edema, thus confirming the existence of the phenomenon.[6,8] Swan-Ganz catheterization in five patients also produced evidence of non-cardiac pulmonary edema.

Typically, symptoms develop within an hour of ingesting hydrochlorothiazide. Common complaints include chest pain, shortness of breath, fever, nausea, vomiting, a non-productive cough and wheezing. Typical exam findings include tachypnea, tachycardia and bibasilar crackles. The chest X-ray usually shows a normal sized cardiac silhouette with an alveolar and interstitial edema pattern. With prompt diagnosis and treatment, these manifestations usually resolve in one or two days. Treatment is supportive with fluids, vasopressors and, if needed, ventilator support. In several cases corticosteroids and antihistamines were used; neither, however, has been shown to be beneficial.

In conclusion, hydrochlorothiazide-induced pulmonary edema is a rare but potentially fatal reaction to a very commonly prescribed drug. However, with appropriate diagnosis and management, complete recovery can be expected. The possibility of this reaction should be part of the differential diagnosis of any patient with acute pulmonary edema and a history of recent hydrochlorothiazide ingestion.

References

1. Koch H, Knapp DA. Highlights of drug utilization in office practice. National ambulatory medical care survey, 1985. In National center for health statistics: Advance data from vital and health statistics, No. 134. DHHS publication No. (PHS) 87-1250. Government Printing Office, 1987.
2. McEvoy GK, ed. American hospital formulary service drug information 88. Besthesda, MD: American Society of Hospital Pharmacists; 1988:1430-1434,1438-1440.
3. Steinberg AD. Pulmonary edema following ingestion of hydrochlorothiazide. *JAMA* 1968; 204:167-168.
4. Prupas HM, Brown D. Acute Idiosyncratic reaction to hydrochlorothiazide ingestion. *West K Med* 1983 Jan;138:101-102.
5. Levay ID. Hydrochlorothiazide-induced pulmonary edema. *Drug Intell Clin Pharm.* 1984 Mar;18:238-239.
6. Alted E, Navarro M, Cantalapiedra JA, Alvarex JA, Blasco MA, Nuñez A. Non-cardiogenic pulmonary edema after oral ingestion of hydrochlorothiazide (letter). *Intensive Care Med* 1973;13:364-365.
7. Piper C, Wallem D, Wexche D, Brattig N, Diao GJ, Berg PA. Lungenödem nach einnahme von hydrochlorothiazid (English abstract). *Dtsch med Wschr* 1983;108: 1480-1483.
8. Beaudry C, Laplante L. Severe allergic pneumonitis from hydrochlorothiazide. *Ann Intern Med* 1973; 78:251-253.
9. Caduff F, Gloor HJ. Hydrochlorothiazid-induziertes lungenödem mit schock (English abstract). *Schweiz med Wschr* 1988; 118:139-142.
10. Dorn MR, Walker BK. Noncardiogenic pulmonary edema associated with hydrochlorothiazide therapy. *Chest* 1981 Apr; 79:482-483.
11. Frierson JH, Marvel SL, Thomas GM. Hydrochlorothiazide-induced pulmonary edema with severe acute myocardial dysfunction. *Clinical Cardiology* 1995 Feb; 18(2):112-114.
12. Garcia MJ, Kidwai Z, Rosa J, Cooper EB. Thiazide-induced pulmonary edema: a case report. *Connecticut Med* 1992 Apr; 56(4): 185-186.
13. Gould L, Reddy CVR, Zen B, Singh BK. Life-threatening reaction to thiazides. *NY State J of Medicine* 1980 Dec;1975-1976.
14. Grace AA, Morgan AD, Strickland NH. Hydrochlorothiazide causing unexplained pulmonary oedema. *Brit J Clin Practice* 1989 Feb;43: 79-81.
15. Kaufman A, Montilla E, Helfgott M, Fiorelli R, Mueller H. Pneumonitis and Hydrochlorothiazide (letter). *Ann Intern Med* 1973; 79:283-4.
16. Klein MD. Noncardiogenic pulmonary edema following hydrochlorothiazide ingestion. *Ann Emerg Med* 1987 Aug;16:901-903.
17. Leser C, Bollinger CT, Winnewisser J, Burkart F, Perruchoud AP. Pulmonary oedema and hypotension induced by hydrochlorothiazide. *Monaldi Arch Chest Dis* 1994 Sept 49(4):308-310.
18. Shieh CM, Chen CH, Tao CW, Tasi JJ, Perng RP. Hydrochlorothiazide-induced pulmonary edema: a case report and literature review. *Chinese Med J* 1992 Dec 50(6): 495-499.
19. Wagner AC. Interstitial Pulmonary edema due to hydrochlorothiazide: case report. *Virginia Medical* 1983 Dec;110:715-716. ❖

Case Report:
Successful Treatment of a Patient with Chronic Fatigue Using Head-up Tilt Guided Therapy

Kushal K. Handa, MD; Jasbir S. Sra, MD; and Masood Akhtar, MD, Milwaukee

Introduction

Chronic fatigue syndrome is a poorly understood disorder with a reported prevalence of up to three per thousand.[1] The syndrome itself is defined by profound fatigue lasting at least six months, often beginning abruptly and not meeting the criteria for other medical or psychiatric disorders. The fatigue characteristically is worse following levels of physical exertion that had been easily tolerated in the past. Other prominent features of chronic fatigue syndrome include light-headedness and difficulty in thinking or concentrating. No pathognomonic signs or tests have been identified and no therapy including acyclovir or immunoglobulin has proved consistently effective.[2,3]

Neurocardiogenic (vasovagal) syncope is a common disorder of autonomic cardiovascular regulation.[4] Recently, head-up tilt table testing has been used to induce hypotension and bradycardia in susceptible individuals.[5] The use of head-up tilt table testing has also been extended to patients with chronic fatigue syndrome who show an abnormal response.[6] During tilt table testing patients are tilted at a 70^{0}angle for twenty minutes. If hypotension with or without bradycardia is not provoked, the patient is placed in the supine position and an isoproterenol infusion is started at 1mg/min. The dose is increased gradually until an average increase in heart rate of 20% is achieved and the test is repeated as before. The exact mechanism underlying the pathogenesis of neurocardiogenic syncope is unclear but is thought to be a clinical example of the BezoldJarisch reflex. During this, reflex activation of mechanoreceptors (vagal C fibers) leads to sympathetic inhibition and parasympathetic stimulation causing hypotension and bradycardia.[7]

Several treatment modalities including beta-blockers, disopyramide and fludrocortisone have been used successfully to treat this condition.[4] It has also been shown that intravenous esmolol during head-up tilt table testing can identify patients who will respond to oral betablocker therapy.[8]

Recent studies have suggested a link between neurocardiogenic dysfunction and chronic fatigue syndrome.[9] Evidence for this association comes from the extensive overlap in symptoms between the two conditions. Recent work from our institute has shown that patients diagnosed with neurocardiogenic syncope may have symptoms which include fatigue, post-exercise fatigue, headaches, weakness, joint pains and myalgia.[10] It would thus seem logical that chronic fatigue syndrome or chronic fatigue may represent one point on a spectrum of autonomic dysfunction. In this report we describe a patient with chronic fatigue who was evaluated and treated with head-up tilt test guided therapy.

Case Report

The patient is a 43 year-old white male who presented to his local hospital with complaints of sudden onset of severe fatigue, nausea and chest pains atypical for angina. There was no history of syncope or presyncope. For a six-month period the patient had been disabled by these symptoms to the point that he was unable to work. His symptoms were most profound after exertion and often associated with nausea which was not relieved with rest. He had frequent episodes of diaphoresis and palpitations associated with activity. The patient continued to have all these symptoms despite an extensive medical work-up which included stress cardiolyte, two cardiac catheterizations, pulmonary ventilation and perfusion scans, CT scan of the chest, serological assays for connective tissue disease and upper GI endoscopy. Six months after his initial presentation the patient was referred for further evaluation to our laboratory. His symptoms were graded and he was noted to have 50-70% limitation of his regular daily activity on account of these symptoms. The patient was taken to the electrophysiology laboratory for a head-up tilt test.

The test was performed with the patient in the non-sedated, post-absorptive state. The blood pressure was monitored via an intra-arterial cannula inserted percutaneously into a radial artery. A

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peripheral venous access was inserted for administration of medications. Readings from three surface electrocardiogram leads were achieved as well as blood pressure tracing in conjunction with a time display. The heart rate and blood pressure were measured at baseline with the patient in supine position for 15 minutes. The patient was then positioned upright at an angle of 70^0 with a footboard used to bear his weight. About 18 minutes into the test the patient started becoming hypotensive with a blood pressure of 70/50 which was down from 140/90 and developed bradycardia with a sinus rate of 45 which was down from 70. The patient was presyncopal at this stage and reproduced his symptoms of extreme fatigue prior to the presyncope. Upon placement into supine position the hemodynamic parameters normalized. At this stage an Esmolol infusion at 500mcgs per kilogram per minute followed by 300mcgs per kilogram per minute was started. Following this the patient was re-tilted for up to 20 minutes. At the end of this test he had remained asymptomatic for fatigue and his hemodynamic parameters had remained unchanged. In essence the symptoms which had been precipitated by the tilt had been suppressed with Esmolol. The patient was started on Pindolol (a beta-blocker with intrinsic sympathetic activity) at a dosage of 5mg twice daily. The patient has been followed up 12 weeks following initiation of the therapy and his presenting symptoms reassessed and scored. There has been marked improvement with respect to all his initial complaints, especially fatigue, chest pain, dyspnea and exercise tolerance. Indeed the patient states that his clinical improvement has been over 90%. The most important indicator of his response has been his ability to pursue full-time employment, something which he could not do for almost six months.

Discussion

This case highlights the importance of considering tilt-table testing in patients suffering with chronic fatigue. Given the overlap between patients who fulfill criteria for chronic fatigue syndrome and neurocardiogenic syncope, the performance of a tilt study should be considered an important part of the diagnostic work-up, since the treatment outcome may be predicted on this basis. Indeed, previous studies have shown an abnormal response to tilt testing in as many as 96% of patients with chronic fatigue syndrome.[6] Chronic fatigue is a known symptom of neurocardiogenic syncope and has been reported following recovery from syncopal episodes." This patient had symptoms which categorized him as having chronic fatigue and yet in the absence of syncope or presyncope he had a positive tilt study. He therefore illustrates a patient population which exemplifies the overlap between the two clinical entities and benefit from appropriate therapy. Indeed, it is a paradox that betablockers which may cause fatigue in some patients can actually reverse the symptoms in others who fall into the above category, this may be explained by the action of beta-blockers on vagal efferent fibers.

Chronic fatigue syndrome is defined by strict diagnostic criteria set up by the Centers for Disease Control and Prevention (CDC).[12] These criteria include fatigue lasting more than six months with associated fever, weakness, post-exercise fatigue, arthralgias and headaches. The signs associated with this clinical entity include fever, pharyngitis and tender lymphadenopathy. It is known that as many as 25 % of the population that suffers with fatigue do not fulfill the guidelines for chronic fatigue syndrome as was the case with our patient. The association between positive tilt testing and chronic fatigue syndrome implies that the underlying physiological changes known to occur in neurocardiogenic syncope may also be apparent in chronic fatigue. Furthermore, it remains to be seen if treatment with beta-blockers and other drugs used for neurocardiogenic syncope will show a long term benefit for patients with chronic fatigue.

The case report which has been presented exemplifies the need to consider tilt table testing in such patients who present with chronic fatigue. Indeed this patient has benefited considerably from medication directed at treating the neurocardiogenic component. Since prior randomized trials have shown no sustained benefit in symptoms among patients with chronic fatigue syndrome who are treated conventionally[2,3] the use of tilt table testing may help to select a population which will benefit from appropriate treatment. Placebo controlled trials are obviously needed to further address the issue of tilt-guided therapy in these patients.

References

1. Gunn WJ, Connell DR, Randall B. Epidemiology of chronic fatigue syndrome. *Ciba Found Symp* 1993;173:83-101.
2. Peterson PK, Shepard J, Macres M, et al. A controlled trial of intravenous immunoglobulin G in chronic fatigue syndrome. *Am J Med* 1990;89:554-560.
3. Straus SE, Dale JK, Tobi M, et al. Acyclovir treatment of the chronic fatigue syndrome. *N Engl J Med* 1988; 319: 1692-1698.
4. Sra JS, Jazayeri MR, Dhala A, et al. Neurocardiogenic syncope: Diagnosis,mechanisms,and treatment. *Cardiol Clin* 1993; 11: 183-191.
5. Sra JS, Anderson AJ, Sheikh SH, et

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al. Unexplained syncope evaluated by electrophysiologic studies and head-up tilt testing. *Ann Int Med* 1991;114:1013-1019.

6. Bou-Holaigah I, Rowe PC, Kan J, Calkins H. Relationship between neurally mediated hypotension and the chronic fatigue syndrome. *JAMA* 1995;274:961-967.
7. Mark AL: The Bezold-Jarisch reflex revisited: Clinical implications of inhibitory reflexes originating in the heart. *JAm Coll Cardiol* 1983;1:90-102.
8. Sra J, Vishnubhakta SM, Jazayeri MR, et al. Use of intravenous esmolol to predict efficacy of oral beta-blocker therapy in patients with neurocardiogenic syncope. *J Am Coll Cardiol* 1992;19:402-408.
9. Rowe PC, Bou-Holaigah I, Kan JS, Calkins H. Is neurally mediated hypotension an unrecognized cause of chronic fatigue? *Lancet* 1995;345:623-624.
10. Narasimhan C, Sra JS, Maglio C, et al. Clinical spectrum of neurocardiogenic syncope: Effect of treatment on related symptoms. *Circulation* 1996;94:8:I-334.
11. Calkins H, Shyr Y, et al. The value of the clinical history in the differentiation of syncope due to ventricular tachycardia, atrioventricular block, and vasodepressor syncope. *Am JMed* 1995;98:365-373.
12. Holmes GP, Kaplan JE, Gantz NM, et al. Chronic fatigue syndrome. *Ann Intern Med* 1988;108:387-389.❖

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Cerebrovascular Accidents (CVAs)

CVAs remain among the leading causes of morbidity and mortality. With the current changes in health care delivery, the management has increasingly become multidisciplinary. Recent studies confirmed previous North American and European findings that the early involvement of a neurologist in the diagnosis and management of stroke correlates with better outcome when all other factors are corrected for, and reduces significantly hospitalization costs and length of stay (Wentworth DA, Dávalos A).

Public emphasis is being placed on rapid evaluation after the first symptoms and signs of a "brain attack". Randomized, placebo-controlled studies were done to evaluate the efficacy of systemic tissue plasminogen activator (tPA) in dissolving a clot in an occluded intracerebral vessel. In a Multicenter NIH study where angiography was not routinely performed, patients who received tPA within 3 hours of their CVA had improved stroke outcome at 3 months, with 30% more patients having little or no disability. However, only 3.5% of all patients with CVAs seen at all centers actually received tPA (Barsan WG). Among treated patients, 34 developed cerebral hemorrhage (13 of which were symtomatic) compared to 11 controls (1 symtomatic), but there was no difference in the final disability (excluding death). According to the European study (Hacke W, ECASS in JAMA) which tested IV tPA in patients seen on average 4 hours after an ischemic stroke, the hemorrhagic rate seems to increase when 1.1 mg/kg of the drug is given between 3 and 6 hours to patients with severe stroke and normal or only few signs of early infarction on CT scan. Serious intracranial hemorrhage occurred in 10.5% versus 3.4%, but overall hemorrhage rate were similar: 43.7% versus 36.7%. The French study administered tPA 0.8 mg/kg to 43 patients up to 7 hours after a carotid CVA and 58% had complete regression even when consciousness was disturbed (P. Trouillas). In general, patients whose acute CT scans showed major early signs of infarct and those with severe neurologic deficit had the highest hemorrhagic risk.

Current studies are considering other systemic or intra-arterial thrombolytics such as streptokinase, urokinase, Pro-urokinase, or intra-arterial tPA (Barnwell SL).

Transluminal balloon angioplasty of intracranial vessels that rethrombose immediately after intra-arterial thrombolytic therapy can be also beneficial (Tsai FY). The current North American Carotid Percutaneous Transluminal Angioplasty Registry involved 147 subjects with >70% stenosis (mean 84%) and reduced stenosis in 83% to an average of 37% (including failures) but clinical follow-up was brief (Robert DG Ferguson). The rate of death or stroke was 9% but patients enrolled were sicker than controls.

Once a CVA occurs, the salvation of the adjacent ischemic penumbra area becomes also important (Hossmann K-A). In a well-designed prospective study from France (Marchal G), at least 8 out of 30 patients showed substantial volume of brain tissue that is salvagable for up to 17 hours after a CVA in the middle cerebral artery territory. Future studies are evaluating hypovolemic therapy with low molecular-weight dextrans, calcium channel blockers, and selective N-methyl-D-aspartate inhibitors (such as HU-211, synthetic cannabinoid; Belayev L). These drugs may be used in the future along with other first-line agents to facilitate reperfusion.

Following a CVA, both motor and cognitive outcomes are significantly better in a comprehensive stroke program (Kaste M, Kalra L, Nakayama H). Sensory stimulation helps postural control after stroke (Magnusson M). Another preliminary controlled study found that Dextroamphetamine 10 mg (versus Placebo) every 4th day for 10 sessions paired with physical therapy improved the rate and extent of motor recovery after ischemic CVA. The drug was administered 16-30 days after CVA (D. Walker-Batson).

Alzheimer Disease (AD)

A Consensus panel from NIH agreed that the association between AD and APOEε4 is valid, but its use for predictive testing is not recommended. The absence of prospective odds ratio, the lack of knowledge regarding other factors that modify APOE-related risk, and the futility and cost of test were considered sufficient negative factors. APOEε4 promotes the accumulation of ß-amyloid protein in the cortex and vessels of carriers. APOE's in general are believed to have a role in neuronal plasticity (Snipes GJ).

Pharmacotherapy has focused on increasing acetylcholine in the brain given its early decline in AD. Tacrine (tetrahydroaminoacridine)

Continued on next page

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Continued from previous page

was the first anticholinesterase inhibitor used for the treatment of AD. A modest success in early AD was counterbalanced by a significant incidence of side effects, mainly hepatic and cholinergic. Current agents such as Velnacrine, Donezepil, Metrifonate and ENA 713 are being evaluated.

Movement Disorders

Recent advances in movement disorders involve both diagnosis and treatment. A prospective study of 16 parkinsonian using 18-Fluorodopa PET imging repeated several years later found a gradual decrease in neuronal dopamine (measured as PET index) by 1.7% per year compared to 0.31% for control subjects (Vingerhoets FJG). Of interest is that deprenyl (MAO-B inhibitor) made no difference in the rate of decline. More studies are confirming the role of genetic factors in the disease: the risk of parkinson's age-adjusted odds ratio was 3.5 for parents and siblings of patients (Payami H).

Another study of Multiple System Atrophy involved 16 patients prospectively and 16 retrospectively. In 63%, there was loss of striatal dopamine receptors by 123I-iodobenzamide-SPECT (Schulz JB).

A multicenter study of Parkinson's disease in Sydney found that bromocriptine monotherapy does not cause dyskinesia or end of dose failure, but was less effective than levodopa/carbidopa. The bromocriptine group however had more patients with dementia and gait disroder (Hely MA). There is an increasing consensus that levodopa should preferably not be given before the age of 50 years, but the issue is still debated.

Clozapine, a D1 antagonist, was effective in rest tremor of Parkinson's disease (Jansen ENH). Side effects in 23 patients included sedation in 8 (2 required naloxone), neutropenia in 1, and hypersalivation in 6. The drug was also effective in treating the psychosis in parkinsonian patients.

Deep brain stimulation is emerging as effective and safe in the treatment of both severe rest and essential tremor. It provides an alternative to bilateral thalamotomy or pallidotomy.

The efficacy of Botulinum toxin in a variety of dystonias (blepharospasm, torticollis, occupational cramps, spasmodic dysphonia, oromandibular dystonia and dyskinesia) is currently well-studied and proven. The drug is currently evaluated for intractable spasticity of limbs, and the initial results are promising (Cosgrove AP).

A trial of ammonium tetrathiomolybdate (trientine) in 17 patients with neurologic complications of Wilson's disease over 8 weeks followed by oral zinc was safe and effective. This contrasts with a 50% rate of initial deterioration on penicillamine, of which 25% never recover to their pre-penicillamine status. (Brewer GJ).

Recent genetic advances have found the marker for certain Spinocerebellar Ataxias (SCA). SCA types 1 through 5 are now linked to chromosomes 6, 12, 14, 16, and 11 respectively. For instance, a mutation that changes histidine to glutamine would lead to adult-onset spinocerebellar ataxia. SCA1 is linked to trinucleotide repeats within the ataxin-1 coding sequence (Zoghbi & Orr). The role of Vitamin E is scrutinized, since some of these mutations impair an α–tocopherol transfer protein that is needed for the intracellular shuttling of Vitamin E into the cells.

Neuromuscular Disorders

A transgenic mouse model for familial ALS was developed (Dal Canto MC). This should hopefully shed more light on the role of the mutation of Superoxide dismutase (SOD-1) in the genesis of these cases which tend to be more severe.

The use of IV gammaglobulins (IVIG) is increasingly beneficial in a variety of inflammatory demyelinating polyneuropathies, and is not restricted to Guillain-Barre syndrome any longer. Some forms of lower motor neuron syndromes (particularly those associated with high titers of antiganglioside GM1 antibody) also respond favorably (Azulay J-P).

The real cause of the post-poliomyelitis syndrome remains debatable. A well-designed longitudinal study from Rochester, MN found that post-poliomyelitis symptoms develop in 30 (60%) of patients (Windebank AJ). The cause was however unrelated to poliomyelitis in 20 (DJD, diabetes, depression, alcohol, disc herniation), and was due to mechanical reasons in the remaining 10. The concept of disuse/overuse seems therefore minor.

Many muscular dystrophies are related to the dystrophin-glycoprotein complex (DGC) (Worton R for review). The DGC is a set of proteins that link the muscle inner cytoskeleton to the surrounding extracellular matrix. It has 4 main components: Dystrophin; Dystroglycan (α- and ß-); Sarcoglycan (α-, ß- and γ-); Merosin (α2-laminin). Dystrophin abnormalities have already been described in Duchenne and Becker muscular dystrophies. Sarcoglycan abnormalities are now recognized in subsets of limb-girdle dystrophies (α- on chromosome 17, ß- on chromosome 4, and γ- in Tunisian pedigrees). Merosin is absent in many congenital muscular dystrophies. Staining for these molecules will help in the diagnosis and genetic counseling of the patients.

Demyelinating Diseases

Treatment advances focus on new therapeutic agents for multiple sclerosis (MS). Subcutaneous In-

terferon (IFN) beta-1b (Betaseron) is curently approved for use in relapsing remitting MS. The drug reduces the frequency and severity of attacks and the number and size of new lesions on MRI. It is currently being tested in chronic progressive MS. Intramuscular IFN beta-1a (Avonex) also reduces the rate of exacerbations and new lesions and is used for relapsing remitting disease.

A prospective study found that low-dose Methotrexate (7.5 mg/week) over a 2-year period in progressive MS seems to reduce the rate of progression (Goodkin DE).

Cladribine (Leustatin) is an antilymphocytic agent. Doses of 0.7 mg/kg in 4 monthly courses given for chronic progressive MS (Sipe JC) resulted in improvement that was maintained for 24 months. Thrombocytopenia was a dose-related complication in 7 out of 24 patients. Also 4 patients developed zoster that responded to acyclovir.

Roquinimex (Linomide) is a synthetic immunomodulator that increases NK cell activity. It inhibits T-cell activation at very early stages. Side effects were mild (myalgias, arthralgias, edema). Oral doses 2.5 mg/day for patients with advanced disease showed newly enhanced lesions on MRI in 33% vs 75% of placebo at 12 months (D. Karussis).

Copolymer-1 (Copaxone) which mimic myelin basic protein also appears to be effective in MS and is currently evaluated in early disease.

A controlled study showed that Flu vaccination did not increase the rates of progression or exacerbation over the subsequent 6 months (Aaron E. Miller). The study randomized 103 patients to flu vaccine or placebo vaccine: 3 pts in vaccine and 2 pts in placebo had MS attacks within 28 days of inoculation. By 6 months, there were 11 attacks in the vaccine and 5 in the placebo, which was not statistically significant.

Epilepsy

New anticonvulsants continue to appear. Fosphenytoin sodium is a phenytoin prodrug with high aqueous solubility which is rapidly and completely converted to phenytoin. It has the added advantage of being 90% bioavailable when administered intramuscularly. The doses used are equivalent to those of phenytoin. The cardiovascular side effects of IV use are reduced and the drug can be administered up to 3 times faster than IV phenytoin. Fosphenytoin is becoming the first drug of choice in status epilepticus. Lamotrigine (doses up to 400 mg/d) is effective for refractory partial seizures (Messenheimer J). Topiramate and Ganaxolone (GABA-A agonist) are promising new agents. A study found that rectal Diazepam 0.2-0.5 mg/kg is as efficacious as IV doses of 0.1-0.3 mg/kg with fewer respiratory problems (Dieckmann RA).

CT scan imaging remains useful in the few epilepsies associated with cerebral calcifications: Sturge-Weber syndrome, cysticercosis and occipital epilepsy in celiac disease. Otherwise, MRI is the imaging procedure of choice in epilepsy. If medial temporal sclerosis is suspected, gradient echo sequences with thin coronal slices of the temporal lobes should be requested since routine MRI may miss the lesion.

Seizures refractory to at least three first line agents for 2 years or more should be strongly considered for surgery. Progressive neurologic or degenerative disorders are contraindications. Psychiatric disorders and extremes of age are relative contraindications. For partial epilepsy, one aims at a cure; for generalized epilepsy, the purpose is palliative. For the workup of patients, detailed EEG monitoring is necessary. FDG-PET imaging is useful in evaluating temporal lobe epilepsy (TLE). Interictal hypometabolism is present in 60-80% of TLE. The ictal SPECT with Tc is positive in 90% of TLE, but interictal imaging with SPECT is positive in only 40-60% of patients. MR spectroscopy appears promising. Surgical techniques include lesionectomy, temporal lobe resection, extratemporal resection, hemispherectomy, corpus callosotomy, and multiple subpial transection. Up to 69% of patients become seizure free, and 24% have considerable improvement at one year after surgery for TLE; the success rate is less in extratemporal epilepsy. Anterior temporal lobectomy has a perioperative mortality of 2%, but the death rate over 5 years was three times less often in surgical patients than in those with suboptimal pharmacologic control.

A study in patients taking various anticonvulsants showed that routine bone marrow is not needed for WBC count of 2000-4000/uL (O'Connor CR)

One type of encephalitis (Rasmussen's) presents with continuous, usually focal motor seizures. Autoantibodies to the Glutamate Receptor subtype 3 have been found (Rogers SW). The condition is often refractory to anticonvulsants alone and requires additional treatment with high dose steroids or IV gammaglobulins (Hart YM). ❖

Public Health

Breast Cancer Incidence and Mortality in Milwaukee's North Shore Communities

Patrick L. Remington, MD and Sandi Park, Madison

Introduction

In early 1996, Representative Sheldon Wasserman met with residents of his 22nd Assembly District, over their concern about the apparently high rate of breast cancer in their community. In response to their concern, he asked the Wisconsin Division of Health to investigate breast cancer incidence and mortality rates in this community.

Methods

For the purpose of this study, we analyzed data for women living in the 53211 and 53217 zip code areas, which consists of the villages of Fox Point, River Hills, Whitefish Bay, Bayside, and parts of the Village of Brown Deer and Shorewood. These zip codes include most of the 22nd Assembly District and have cancer and population data available (see map). We obtained information on newly diagnosed breast cancer cases and deaths among residents of Wisconsin from the Cancer Reporting System, Center for Health Statistics, Wisconsin Division of Health, and population estimates from the 1990 U.S. Census.

We used the statewide incidence and mortality rates to determine the ***expected*** number of breast cancer cases in these zip codes. We multiplied the incidence rates (in 5-year age groups) by the 1990 population estimates for these two zip codes. We compared the ***expected*** number of cases to the ***observed*** number of cases for each age group and for all women. Chi square with Yate's correction was used to test for statistical significance. We repeated this methodology for early (i.e., in-situ and localized) and late stage (i.e., regional and distant) cancer and for breast cancer mortality.

Results

Breast Cancer Incidence: Between 1989-1994, 394 women living in these Milwaukee North Shore communities were diagnosed with breast cancer (table). This represents 58 more women being diagnosed with breast cancer than expected, if these communities had the same rate as the state of Wisconsin ($p<0.01$).

The excess of breast cancer is entirely due to an excess of women with early stage breast cancer, with 69 more women with early stage disease ($p<0.001$), and 10 fewer women with late-stage disease (p=not significant) than expected.

Breast Cancer Mortality: Between 1989 and 1994, 108 women living in these Milwaukee North Shore communities died of breast cancer (table). This represents 21 more deaths from breast cancer than expected ($p<0.05$).

Comment

This study demonstrates that the incidence of breast cancer is higher in these Milwaukee North Shore communities, with an average of nine to ten more cases diagnosed each year than expected. However, breast cancer is diagnosed at an earlier stage, compared with the entire state. Among the 376 women whose extent of disease was reported to the cancer reporting system, 282 (74%) were diagnosed at an early stage. This compares to 68% of women who were diagnosed at an early stage in the entire state in 1991.[1] The earlier detection of breast cancer is likely a result of a greater use of mammography in these communities, compared with the rest of the state.[2,3]

Milwaukee North Shore Communities

There are several explanations for the observed higher rate of breast cancer. First, it is likely that the increased use of mammography has resulted in an increase in the number of breast cancer cases being identified. Mammography can increase the apparent incidence of breast cancer, by finding cancer early, and by diagnosing breast cancer that might have otherwise never been detected.[4]

In addition, it is possible that the 'true' incidence of breast cancer is higher in these communities. Studies have demonstrated higher rates of breast cancer among women living in urban communities, and among women of higher socioeconomic status.[5,6] The exact reasons for these increased rates, such as differences in diet, reproductive practices, or exposure to environmental factors, have not been elucidated.

This study also demonstrated a higher breast cancer mortality rate in these North Shore communities,

Table: Breast Cancer Incidence in the North Shore Milwaukee Communities of Shorewood, Whitefish Bay, Fox Point, Bayside, and River Hills (Zip Codes 53211 and 53217), Wisconsin, 1989-1994.

	Observed	Expected	Obs.-Exp.	Chi-square	P-value
Cases	394	336	58	9.8	<0.01
Early stage	282	213	69	22.1	<0.001
Late stage	94	104	-10	0.9	N.S.
Deaths	108	87	21	5.2	<0.05

N.S. = Not significant

with an average of three to four more deaths per year than expected. This finding suggests that there is, in fact, a higher underlying incidence of breast cancer in these communities, and that this increased incidence has existed for many years. However, the finding that breast cancer has been detected at an earlier stage over the past five years, means that the mortality rate will decline at a greater rate that in the rest of the state.[7-9]

There are no current public health recommendations for the prevention of breast cancer. All women should practice regular self-breast examination and see their doctor for a physical examination. Mammography is recommended to begin between the ages of 40 and 50, depending on a woman's risk factors and family history.

References

1. Wisconsin Division of Health. Cancer in Wisconsin. Center for Health Statistics, Wisconsin Division of Health, Department of Health and Family Services, 1989-1994.
2. Bush DS, Remington PL, Reeves M, Phillips JL. In situ breast cancer correlates with mammography use, Wisconsin: 19801992. *Wis Med J* 1994 Sep;93(9):483-4.
3. Herzog S, Bush D, Remington P, Reeves M, Adler R. In situ breast cancer: a local area analysis of Dane County, Wisconsin. *Wis Med J* 1994 Sep;93(9):480-1.
4. Lantz PM, Remington PL, Newcomb PA. Mammography screening and the increased incidence of breast cancer in Wisconsin. *JNCI* 1991 Nov;83(21):1540-6.
5. Kelsey JL, Berkowitz GS. Breast cancer epidemiology. Cancer Research 1988;48:5615-5623.
6. Lantz PM, Remington PL. Breast cancer in Wisconsin: assessing the potential for primary prevention. *Wis Med J* Sept;90(9):538-9.
7. Lantz PM, Remington PL, Defo BK. Breast cancer survival in Wisconsin. *Wis Med J* 1992 Oct;91(10):597-8.
8. Remington P, Schell W, Hoffman K, Fox J, Stephenson-Vine L. Breast cancer mortality rates decline in Wisconsin women. *Wis Med J* 1995 Oct;94(10):551-553.
9. Palmersheim K, Remington P. Trends in breast cancer mortality for blacks and whites in Wisconsin and the United States, 1979-1992. *Wis Med J* 1996 April;95(4):245-7.❖

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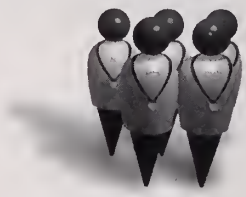

MetaStar Matters
Adverse Drug Reaction Project

Joseph N. Blustein, MD; Kristine M. Miesbauer, RN; Deborah Saine, RPh; Nathan F. Williams, MS; and Jay A. Gold, MD, JD, MPH, Madison

Adverse drug reactions (ADR) are the untoward effects of medications. They are a significant, often preventable cause of morbidity and mortality in the United States.[1] Studies estimate that 3% to 7% of all hospital admissions are the result of an ADR, while 10% to 20% of all inpatients experience an ADR while hospitalized.[2] Costs to the hospital for additional services and hospitalized days for patients with ADRs are substantial. Drug injuries frequently result in malpractice claims which account for the highest total expenditure in settlements and awards of any type of procedure-related injury.[3]

Although both morbidity and mortality are increased by drug reactions, ADRs continue to be under-reported by hospital staff. Up to 80% of ADRs are predictable and preventable.[1] However, many hospitals have done relatively little to identify and understand preventable ADRs. The Joint Commission on Accreditation of Healthcare Organizations (JCAHO) requires hospitals to assess and evaluate their ADRs. The American Society of Health-Systems Pharmacists (AHSP) has established guidelines for monitoring adverse drug reactions in the hospital.[4] The Pharmacy and Therapeutic Committee and the pharmacy department at each institution should provide the leadership to implement a program for reporting and monitoring adverse drug reactions. The success of a program relies on voluntary reporting by health care professionals. The program must be easy and convenient to use in order to be effective. A well-designed system will include feedback to reporters combined with an educational component.

MetaStar recently collaborated with 20 Wisconsin hospitals in a cooperative quality improvement project aimed at reducing the incidence of ADRs in Medicare inpatients. The project was directed at

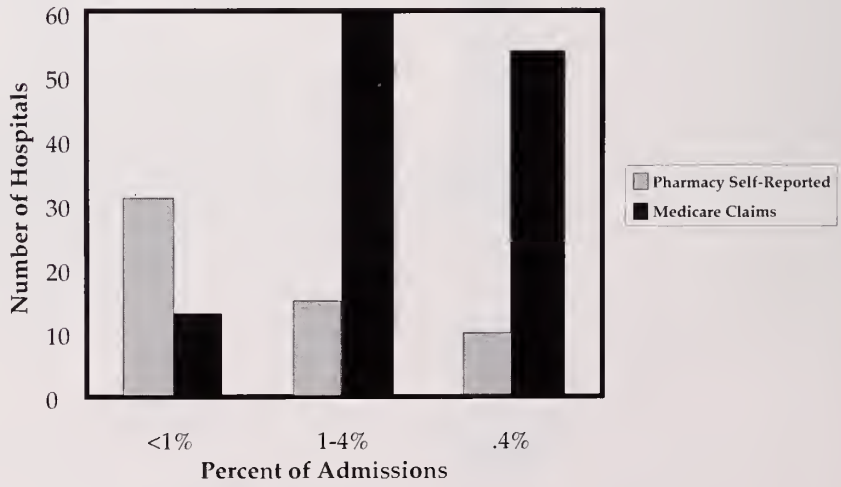

Fig 1. Hospital 1995 ADR Rates.

MetaStar Matters is not reviewed by the *WMJ* Editorial Board. Dr Blustein is Medical Director and Associate Clinical Coordinator; Ms Miesbauer is Project Coordinator/Leader; Mr Williams is Data Analyst and Biostatistician; and Dr Gold is Senior Vice President and Principal Clinical Coordinator and all are associated with MetaStar. Ms Saine is Drug Information Pharmacist at Meriter Hospital. Reprint requests to Jay A. Gold, MD, JD, MPH, MetaStar, 2909 Landmark Place, Madison, WI 53713.

utilization of more effective adverse drug reaction reporting and monitoring systems. The objectives of the project focused on improving ADR reporting systems and using the information from such a system for ongoing education to the hospital staff.

A study group of pharmacists and physicians developed the two indicators for this project. The indicators are based on independent methods of measuring ADRs within institutions.

The first indicator is the pharmacy's reported rate of ADRs. The baseline rate was obtained from a MetaStar questionnaire sent to the pharmacy directors of all acute care hospitals in Wisconsin. We asked for the 1994 and 1995 inpatient ADR rates for all ages as reported to JCAHO. The questionnaire also asked about hospital's ADR reporting mechanisms, monitoring programs and follow-up procedures. Pharmacy ADR rates for 56 Wisconsin hospitals who submitted 1994 and 1995 information ranged from zero to 8.3% with mean and median equal to 1.7% and .96%, respectively, during 1995. The second indicator is the rate at which ADRs occur based on billing claims. This rate was calculated by dividing the claims which specified an ADR by the total Medicare claims for each provider. The baseline rate was from 1995 Medicare claims for discharges from Wisconsin acute care hospitals. The Medicare ADR rate was computed for each Wisconsin provider. Hospitals ranged from zero to 14.3%, with mean and median equal to 3.9% and 2.7%, respectively. Figure 1. illustrates the different distribution of ADR rates of the two indicators at baseline.

Three regional interactive seminars on developing a high performance ADR reporting and monitoring system were conducted by MetaStar in September 1996. Collaborators were represented by a team of health care professionals from each hospital. Deborah R. Saine, RPh and Glen Schumoch, Pharm.D, MBA, two pharmacist experts in the area of ADR monitoring systems,[2,6] gave presentations on ADR reporting systems and defining ADRs and related terms. They explained the advantages and disadvantages of different types of reporting systems, and discussed the importance of using the ADR database in educating the hospital staff. Results of hospital ADR rates analysis, as well as an analysis of the Medicare claims data correlating length of stay with presence or absence of an ADR ICD-9 code within each of four major medical conditions, also were presented.[5] Three concurrent 30-minute small group breakout sessions were held after the formal presentations. These included demonstrating how to set up an ADR monitoring database on a laptop computer using Epi-Info, reviewing specific tools used in some hospitals for reporting and monitoring ADRs, and creating an improvement plan to develop or revise an ADR reporting and monitoring system.

As a part of the project process, collaborating hospitals were asked to submit improvement plans. One institution developed a computer database to analyze and monitor ADR trends. Another hospital combined technology with direct education by using a computer alarm system for potentially avoidable ADRs. Several collaborating hospitals showed interest in creating a statewide ADR database. MetaStar is actively pursuing this possibility.

The measurement of the two indicators will be repeated at six month intervals over the next year. If the project is successful, we will see an increase in self-reported ADR pharmacy rates during the first phase and, even possibly, during the second phase as well. Assuming no change in coding practices or policy affecting ADR codes, a decrease in the Medicare claims ADR rate during both phases is expected. This anticipated decrease is dependent upon the establishment of more effective ADR reporting systems, thereby, preventing many ADRs.

A 90-minute video of highlights of the ADR seminar is available for viewing. It will be aired on WYOU on Sunday, April 6, 1997 from 1:30 p.m. to 3:00 p.m. For information about the video or the project, please contact Dr. Joe Blustein or Kris Miesbauer at MetaStar, 1-800-362-2320.

References

1. Melmon KL. Preventable drug reactions-causes and cures. *N Eng J Med.* 1971; 284:1361-67.
2. Saine DR. A successful community hospital program for monitoring adverse drug reactions. *Top Hosp Pharm Manage*, 1992; 12(2), 19-30.
3. Beard K. Adverse reactions as a cause of hospital admission in the aged. *Drugs & Aging*, 1992; 2 (4): 356-67.
4. Anonymous. AHSP guidelines on ADR monitoring and reporting. *Am J Health-Syst Pharm*, 1995; 52:417-19.
5. Saine DR, et al. Cost of adverse drug reactions. (unpublished data).
6. Schumoch GT, Thorton JT. Focusing on the preventable. *Hosp Pharm*, 1992; 27:538.❖

The Right Prescription for Physicians

Kalisa Barratt, JD, SMS Assistant General Counsel

Over the past several months, the SMS Office of General Counsel has fielded a variety of questions relating to drug prescribing and dispensing. This article is intended to give a general overview of these laws. If you have specific questions, you may call Kalisa Barratt, SMS Assistant General Counsel, (via e-mail at: KALISAB@smswi.org) or Mark Adams, SMS General Counsel (via e-mail at: MARKA@smswi.org).

DEA registration

A physician who desires to dispense, administer, or prescribe any controlled drug substance is required to have a Drug Enforcement Administration (DEA) number. The initial registration application may be obtained from the DEA divisional office in Chicago. The office has informed the State Medical Society that DEA Headquarters will then mail a renewal application to each physician approximately 45 days before the expiration date found on the certificate. Physicians who move or change their place of business must notify the DEA, Registration Branch, 219 S Dearborn, Suite 500, Chicago, IL 60604, 312-353-1236. According to the regional director of the DEA in Chicago, the deceased or retired physician's DEA number (controlled substances registration certificate), unused government order forms (DEA-222c), and controlled substances should be disposed of as soon as possible. The registration certificate and order forms should be returned to the DEA at the above address. Procedures for the destruction of controlled substances may be obtained by calling the Chicago divisional office.

Prescription requirements

All controlled substance orders must be dated as of, and signed on, the day issued and shall contain the full name and address of the patient, the name, address and registration number of the practitioner, the name and quantity of the drug prescribed and the directions for use including dose and frequency. Prescription orders must be written in ink or be typewritten and must be signed by the practitioner. Thus, the use of post-dated prescription blanks is prohibited.

However, a prescription for a controlled substance listed in schedule II (such as Ritalin) may be dispensed up to 60 days after the date of issue on the prescription order as long as the patient presents the order for dispensing within seven days following its issue. Essentially that means a physician may write an order in advance of the patient's actual need and then order the pharmacist not to fill the prescription until a certain date. This allows a patient to receive up to a three month supply before needing to make another office visit. Wis. Stats., §450.11(1); Wis. Adm. Code Phar 8.05.

Whether a physician licensed in Wisconsin may prescribe drugs in another state depends on both the drug prescribed and the state where the prescription is to be filled. Some states, such as Iowa and Illinois, allow out-of-state prescribers to prescribe both controlled and non-controlled substances to the same degree as the state in which they are licensed. Minnesota allows non-controlled prescriptions to be written across state lines, but not prescriptions for controlled drugs. Michigan allows no out-of state prescriptions. Those physicians who practice on the Wisconsin border should be familiar with the bordering state's laws.

Kalisa Barratt, JD

No physician may prescribe or take without a prescription a controlled substance (schedule I - IV) for his or her own use. Wis. Stats., §161.38(5). Any person who violates this law may be fined not more than $500 or imprisoned not more than 30 days or both. Wis. Stats., §161.435.

The AMA's Code of Medical Ethics suggests, except in the case of emergencies, it is inappropriate for physicians to write prescriptions for controlled substances for themselves or their immediate family members.

Fraudulent procurement of prescription

Often, physicians face the dilemma of a patient who fraudulently procures or alters a drug prescription. Many legal concerns surface including your duty to report and physician/patient confidentiality. Reports concerning theft of prescription blanks should be reported to the Milwaukee DEA, Diversion Investigators, (414) 297-3395. Under federal law, a physi-

cian must report any employee drug diversion to the DEA.

In Wisconsin, no person may obtain or attempt to obtain a prescription drug, or procure or attempt to procure the administration of a prescription drug by fraud, deceit or willful misrepresentation. It is also illegal to forge or alter a prescription order or use a false name or address associated with obtaining a prescription. Wis. Stats., §450.11(7). This law is enforced by the Department of Justice and the Medical Examining Board. Violations include penalties of not more than $500 or not more than six months in jail, or both.

Although any information communicated to a physician in an effort to procure unlawfully a prescription drug is not a privileged communication under the legal rules of evidence, Wis. Stats., §450.11(7)(b), there is only a narrow circumstance where a physician may share the confidential information obtained through the physician/patient relationship with limited fear of liability.

Health care professionals who, in good faith, provide other health care professionals with information concerning violations of the pharmacy chapter are given civil and criminal immunity for reporting those violations. "Health care professional" includes pharmacists, nurses, dentists, social workers, and even veterinarians. Wis. Stats., §450.10.

Note, however, this immunity is not granted to reports made to anyone other than a health care professional. It is likely a report to the local law enforcement authorities would constitute a breach of the doctor/patient privilege. Moreover, it is less than clear how this state law interacts with certain Federal confidentiality requirements relating to disclosure of information where the physician provides treatment to alcohol and drug abuse patients. Generally, the Federal law will preempt this state law. Thus, before voluntarily divulging this information, legal counsel should be sought to determine which of these laws applies.

If you believe a patient is fraudulently attempting to obtain or has fraudulently obtained a prescription for drugs:

- Alert other physicians and pharmacists in your area after consulting legal counsel;
- Document the basis for this suspicion in the patient's medical record;
- Keep prescription pads in a secure area;
- Do not have your DEA number preprinted on prescription pads;
- Keep all drugs stored in a locked cabinet with limited staff access;
- Keep a detailed log of all prescription and refill telephone orders - including who called in the order and the drug and dosage prescribed.

Finally, if a physician wishes to terminate the physician/patient relationship because the patient has altered a prescription or has given an incorrect history in an attempt to procure a prescription, care must be taken so as to avoid claims of discrimination.

The Americans with Disabilities Act prohibits discrimination because of a disability or perceived disability. A patient who has a history of drug abuse, but is not currently using illegal drugs, is protected from discrimination under this law. Proper documentation of the non-discriminatory reason for termination will be strong evidence against a discrimination claim.

Physician Assistant prescribing

Physician's assistants may prepare written prescription orders for drugs, other than controlled substances as defined in §161.01(4), Stats., if specifically directed to do so by the supervising physician and in accordance with certain regulatory procedures. The scope of the physician's assistant's prescribing privileges is created to be under the supervision of a physician.

A physician's assistant may only prescribe under an explicit written protocol between the physician's assistant and his or her supervising physician, under the mutual agreement that the physician's assistant is qualified and experienced to do so, with direct consultation with the supervising physician when practicable, and with prescription orders prepared to include the name, address and telephone number of both the supervising physician and the physician's assistant.

The rule, Wisconsin Administrative Code Med 8.08(2), also requires that the supervising physician review and countersign the prescription order either:

1. At the time the prescription order is prepared;
2. Within one day of the patient record prepared by the physician's assistant in the physician's office or hospital at which the supervising physician has privileges; or
3. The supervising physician must review by telephone or other means as soon is practicable but within 48 hours, with the supervising physician countersigning within one week of the record prepared by the physician's assistant if he or she practices in an office facility other than the supervising physician's main office of a facility or hospital in which the supervising physician has staff privileges.

Preprinted prescription blanks

The DEA reports that neither

Continued on next page

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federal law nor administrative regulations prohibits the printing of the physician's narcotic registration number on prescription blanks. Although convenient, from a risk management standpoint, it is not advisable to have your DEA number printed directly on the prescription blanks. Obviously, where a DEA number is pre-printed on prescription pads, special care should be taken to keep the pads securely stored, out of the reach of potential abusers.

Generic substitution

When prescription orders are filled, pharmacists must either dispense the drug product prescribed or its generic equivalent. The generic drug may only be substituted if it is lower in price and if the consumer is informed of the options available and agrees to the substitution. Physicians may hand-write on the prescription order "no substitutions" or similar language or use the initials "N.S." to prevent this possible generic substitution. The term "brand medically necessary" is required under the Medicaid program. No preprinted statement regarding substitutions may appear on the face of the prescription order, including check-off boxes designating when substitution is or is not authorized. (Wis. Stats. §450.13)

Unprofessional conduct and drug prescribing

Following is a list of activities relating to drug prescribing considered unprofessional conduct by the Medical Examining Board, found in the Administration Code Med 10.

- Administering, dispensing, prescribing, supplying, or obtaining controlled substances as defined in the Uniformed Controlled Substances Act, Wis. Stats., §161.01 (4), otherwise than in the course of legitimate professional practice, or as otherwise prohibited by law.

- Prescribing, ordering, dispensing, administering, supplying, selling or giving any anabolic steroid for the purposes of enhancing athletic performance or for other nonmedical purposes.

- Prescribing, ordering, dispensing, administering, supplying, selling, or giving any amphetamine, sympathomimetic amine drug or compound designated as a schedule II controlled substance pursuant to the provisions of the Uniformed Controlled Substances Act to or for any person except for the following:

  1. Use as an adjunct to opioid analgesic compounds for treatment of cancer-related pain;

  2. Treatment of narcolepsy;

  3. Treatment of hyperkinesis;

  4. Treatment of drug-induced brain dysfunction;

  5. Treatment of epilepsy;

  6. Differential diagnostic psychiatric evaluation of depression;

  7. Treatment of depression shown to be refractory to other therapeutic modalities;

  8. Clinical investigation of the effects of such drugs or compounds, in which case an investigative protocol therefore shall have been submitted to and reviewed and approved by the board before such investigation has begun.

Physician dispensing

There are certain requirements a physician must meet when the physician dispenses prescription drugs other than by administering or other than dispensing complimentary samples.

If the prescription is considered to be a poison under the federal poison prevention act (16 CFR 1700.14), the drug may be only dispensed in a child-resistant container. The container used to hold the prescription drug must contain a legible label disclosing: the name and address of the facility from which the prescription is dispensed; the date on which the prescription is dispensed; the name of the physician who prescribed the drug; the full name of the patient; the generic name and strength of the prescription drug dispensed; and, directions for use and any cautionary statements contained in the prescription or as required by law. Wis. Adm. Code Med 17.04.

Logs must be maintained on each prescription drug received, dispensed or disposed of. A notation of the dispensation shall be recorded in the patient record.

Conclusion

There are very specific laws pertaining to dispensing of controlled substances other than schedule I drugs that are beyond the scope of this article. Dispensing of controlled substances require special dispensing, maintenance and recording methods. Physicians who wish to dispense controlled substances should familiarize themselves with these special requirements. ❖

Information Mining on the Internet

Doug Turecek, Management Information Systems director

As anyone with access will tell you, the variation and volumes of information available today on the Internet is difficult to comprehend. The simple fact that placing information on the Internet, and specifically the World Wide Web, is relatively inexpensive compared to traditional media, plus the ability to provide continual updates, and reach millions of people instantly, has caused Web page development to leap to the top of anyone's project list that has information to share. Unfortunately, however, this exponential growth and the chaotic organization of this information has made finding anything a daunting task.

That is one of the reasons the State Medical Society's Web page, **WISMED (www.wismed.com)**, has conveniently organized links to numerous Web sites, including the most popular health care-related sites. Still, we couldn't possibly anticipate the information searching needs of everyone who utilizes our site.

Fortunately, several entrepreneurs identified the problem early and have developed a set of tools called *search engines* which allow you to enter specific criteria to narrow your search. There are two primary methods used by search engines to make the searching process fast and accurate as possible. The first is to designate a computer or multiple computers to do nothing but continually search the Internet for Web pages using automated agents, called *spiders*. Once it finds a page, it can either index the full text of the page or just specific items such as the address or title. Then when you enter the search criteria, the search engine actually searches the index and lists the matching items along with pointers back to the original page.

Another method utilized by the search engines is to only track items which they register or are registered by users. This is similar to calling up your local yellow pages directory and asking them to list your organization under the preferred category. Although this method tends to be less comprehensive, it also tends to limit the amount of chaff returned with the wheat.

Finding a search engine is a lot like using a dictionary to find a word you don't know how to spell. The following is a review of the most popular search engines available today. You will undoubtedly find others in your Internet travels, but learning the nuances of any two or three of these tools should get you to the information that fulfills your needs.

". . . search engines allow you to enter specific criteria to narrow your search."

AltaVista

Digital Equipment Corp.'s AltaVista (http://www.altavista.digital.com) is arguably the most comprehensive and powerful search engine available. AltaVista utilizes the first method described to build its indexes. Digital has dedicated a number of computers which do nothing but search the Internet for Web pages and states that over 50 million pages have been indexed to date. AltaVista then builds an index of every word of every page that is found. While this method will help you find pages with obscure references to a specific illness or drug, it also tends to be overzealous when you use general terms such as "medicine" or "health".

To use AltaVista's default Simple Search, just type in the words you're looking for and press the Submit button. For example, entering **Wisconsin medicine** will find all pages with either of these words; and entering **"health care reform"** will find all pages which have these three words listed together. Because AltaVista will often return hundreds or thousands of matches it would be worth a little extra time to review the Help section for Simple Searches.

For advanced searches, use AltaVista's Advanced search button and utilize binary operators such as AND, OR, and NEAR. For example, entering **safety AND airbags AND children** should find all pages which have all three of these words somewhere in the text. As with the Simple Search, it would be worthwhile to spend time reviewing the Help section for Advanced Searches.

Yahoo!

Yahoo! (http://www.yahoo.com) was the first and is probably the most popular search tool. Yahoo! relies on people to review Web sites, summarize their content and list them in the appropriate hierarchical category. This structure allows you to either drill down through the categories or search for terms which appear either in the category title or the site's summary. A typical search may not result in the large number of matches found with a tool such as AltaVista, but the matches you do find will most likely be more pertinent to your needs. Since Yahoo! doesn't allow a full-text search for specific words on a page, it tends to be weak when

Continued on next page

Continued from previous page

looking for specific words such as a drug or medical condition. On the other hand if you're looking for health care-related issues, you can start by choosing Health and then narrowing your search by choosing one of the sub-indices.

Excite

Excite (http://www.excite.com) has evolved into more than just a search engine. In addition to the typical search functionality, this site also contains well-organized site reviews, news, directories and other references. The search tools are based on Excite's Intelligent Concept Extraction (ICE) technology which locates and gives documents in the full-text index, a rating or confidence level, based on the relevance of keywords. So a simple search may result in a million matches, but unlike AltaVista, the matches are ranked by perceived relevance. In addition, you have the option of sorting the matches by site so you can quickly determine which match is most relevant.

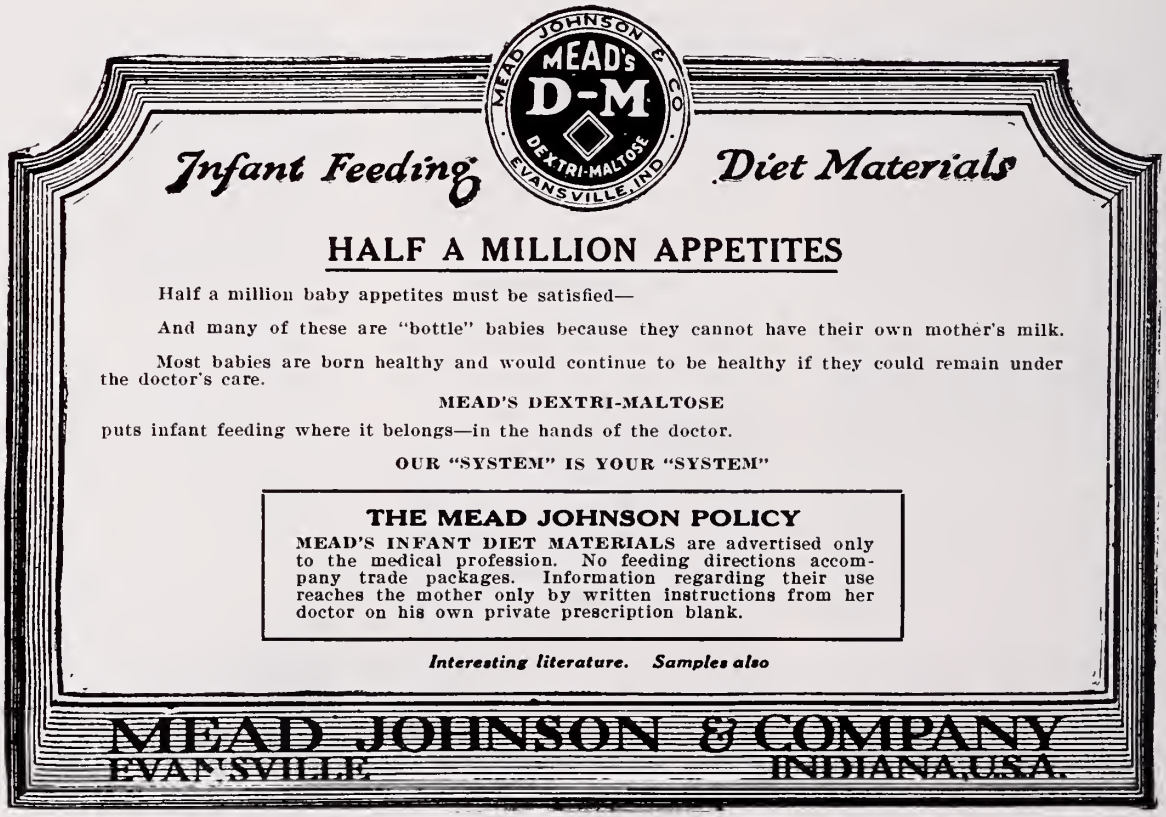
Others

Here are several other sites which you may wish to investigate:

InfoSeek
http://guide.infoseek.com
Lycos
http://www.lycos.com
OpenText
http://www.opentext.com
Webcrawler
http://webcrawler.com

Summary

As with most software, developers tend to create interfaces which seem logical and user-friendly. The only problem is that 'logical' to one person is confusing to another. The best approach is try out several search engines and spend enough time trying sample searches that you get a feel for the degree to which it satisfies your needs. All of these sites have adequate help areas and should be your first stop. Hopefully, these tools will help you to spend less time aimlessly surfing and more time realizing the potential of the Internet. ❖



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Financial Fitness
The Pros and Cons of Living Trusts

Michael Dolan, CLU, ChFC, Madison

LIVING TRUSTS ARE increasingly popular among people seeking to bypass lengthy probate proceedings and to have their estates promptly distributed to their heirs. Living trusts are also being used by retirees who are fearful of losing control of their affairs if they become ill and by people who want the peace of mind of professional money management. Is a living trust appropriate for you? It might be, but you should be aware of both the advantages and disadvantages.

Advantages

On the plus side, a revocable living trust, one that you can revoke or change at any time you decide to do so, lets you retain complete control of your assets. Because you retain control, the assets are included in your estate and are subject to estate tax if tax is due. But they will be distributed to your beneficiaries without the delays, fees or public notice of probate.

Disadvantages

Living trusts also have some drawbacks. Chief among these drawbacks is the administrative problem. A living trust isn't effective unless it actually owns your assets. That means you must transfer ownership of securities and bank accounts to the trust. It means changing deeds to real estate, which can lead to mortgage problems. It also means keeping meticulous records and filing appropriate tax returns for the trust over the years.

Although you (or your estate) may save some money on probate fees later on, the trust itself will probably incur initial legal fees and annual maintenance fees.

In addition, it's important to remember that a trust is a legal entity and, while a living trust is very flexible as legal entities go, you will still face some restrictions. In some states you can be the sole trustee of your own living trust, for example, but in others you must name a co-trustee. Where you must have a co-trustee, you will have to consult that person or institution before taking any action.

A living trust becomes irrevocable after death. At that point, there are a couple of other drawbacks. A trust must pay estimated income taxes while an estate is excused from paying those taxes for the first two years. And a trust must be on a calendar year basis while an estate may elect a fiscal year.

Michael Dolan, CLU, ChFC

There are alternatives to living trusts, such as durable power of attorney which means naming someone else to conduct financial affairs for you should you become incapacitated.

Because this is a complex subject, and state laws vary, it's best to consult an attorney before deciding that a living trust will suit your needs. ❖

Dolan is president and chief operating officer of SMS Insurance Services and a member of the National Associaiton of Life Underwriters.

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Physician Briefs

The * indicates member of the SMS.

Daniel M. Albert, MD, FA,*Davis professor and chair of the University of Wisconsin Medical School Department of Ophthalmology and Visual Sciences, is co-author of the new book "The History of Ophthalmology." The book was officially unveiled in October, 1996 at the centennial meeting of the American Academy of Ophthalmology.

D. Casey Barton, DO,*an orthopedic surgeon, joined Richland Medical Center and Richland Hospital, Inc. He earned his medical degree from Philadelphia college of Osteopathic Medicine. Dr Barton trained in a rotating internship at the Naval Hospital, Oakland, Calif. He served as a line officer in the Navy. After completion of his internship he was assigned as medical officer on board the USS Mars. Completing his tour on the USS Mars, Dr Barton returned to the Naval Hospital in Oakland for orthopedic surgery training. He served as a staff orthopedist at the Naval hospitals in Yokosuka and Okinawa, Japan and in Long Beach Calif., until his retirement from the Navy in 1987. He is a board certified orthopedic surgeon and was elected to the American Academy of Orthopaedic Surgery in 1987.

Lynda Biedrzycki, MD, was appointed assistant professor of pathology at the Medical College of Wisconsin. She is director of the college's department of pathology's autopsy service and is a staff pathologist at Froedtert Memorial Lutheran Hospital.

John A. Frantz, MD,*an internal medicine specialist with the Monroe Clinic, celebrated 50 years in medicine. Dr Frantz earned his medical degree from Rochester University medical school's accelerated program graduating in 1946. He completed his internship at Henry Ford Hospital in Detroit and his residency at the University of Colorado. Dr Frantz worked at the University of Missouri in student health from 1954 to 1955. He moved to Monroe in 1955 to practice medicine. Dr Frantz took a leave of absence to serve as a volunteer for the Peace Corps in Afghanistan, where he also taught medicine at Nangrahar University, Jalalabad, from 1968 to 1970.

Judy L. Fruehbrodt, MD,*a family practitioner, joined the medical staff at Franciscan Skemp Healthcare Holmen Clinic. Dr Fruehbrodt graduated *magna cum laude* at Winona State University with a bachelor of science degree in biology. She earned her medical degree from the University of Minnesota. Dr Fruehbrodt completed her residency in family practice at the Franciscan Skemp Healthcare, Mayo Clinic System, Family Practice Residency.

Deirde Habermehl, MD,*an obstetrician/gynecologist, joined the medical staff at the Monroe Clinic. Dr Habermehl earned her medical degree from the New York University School of Medicine, New York, NY. She completed her internship in general surgery at Brown University, Providence, RI and her residency in gynecology and obstetrics at Stanford University. She is a member of the Association of Professors of Gynecology and Obstetrics and the American Association of Gynecologic Laparoscopists. Dr Habermehl is board certified in obstetrics and gynecology.

Rae Hanson, MD,*a specialist in pediatric neurology, joined the medical staff at Luther Hospital and Midelfort Clinic, Chippewa Falls. He earned his medical degree from the University of Arizona. Dr Hanson completed his internship in pediatrics at William Beaumont Army Medical Center, El Paso, Tex and his pediatric residency at Walter Reed Army Medical Center, Washington, DC. He is board certified with the American Board of Pediatrics, the American Board of Psychiatry and Neurology and the Board of Neurophysiology.

Gregory Hrasky, MD,*an orthopedic surgeon, joined the medical staff at the Monroe Clinic. Dr Hrasky earned his medical degree from Rush Medical College in Chicago. He completed his residency at Rush Presbyterian-St Luke's Medical Center and received pediatric orthopedic fellowships with Shriner's Hospital for Crippled Children in Portland, Ore, and Starship Children's Hospital in Auckland, New Zealand. Dr Hrasky will provide treatment for joint, muscle and tendon problems, including joint replacement, spine and foot surgery. He will specialize in pediatric orthopedics.

James Ketterhagen, MD,*a surgeon, was recently appointed PrimeCare Health Plan, Inc. senior medical director. He earned his medical degree from the Medical College of Wisconsin. Dr Ketterhagen attended Marquette University Law School and is currently enrolled in a master's degree program in health care administration. He has practiced general and vascular surgery for 13 years, and is certified by the American Board of Surgery.

Julian Lombard, MD, professor of physiology at the Medical College of Wisconsin, will serve a four year term as a member of its Experimental Cardiovascular Sciences Study Section in the Division of Research

Grants. Dr Lombard is a leading expert on the physiological effects of high blood pressure on the small blood vessels of the microcirculation and president-elect of the international US Microcirculatory Society.

Carol Martin, MD,*a family practitioner, joined the Krohn Clinic and Black River Memorial Hospital, Melrose. Dr Martin earned her medical degree from the University of Iowa College of Medicine, Iowa City. She completed her family practice residency at the Eau Claire Family Medicine Residency Program in Eau Claire. She is board certified in family medicine and in advanced trauma life support, advance cardiac life support, neonatal resuscitation, and cervical colposcopic technique. Dr Martin is a member of the American Academy of Family Physicians.

K. Neil Mittelberg, MD,*a urologist, joins Dr Phillip Hacker and Dr J R Fuller at Rice Clinic, Stevens Point. Dr Mittelberg earned his medical degree from Loyola University Medical School and received his undergraduate degree in 1986 from Eastern Illinois University. Dr Mittelberg's special interests include prostate diseases, urinary incontinence, kidney stones, pediatric urology, male infertility, and vasectomies.

Charles Nozicka, MD, a pediatric emergency medicine specialist, has been appointed assistant professor of pediatrics at the Medical College of Wisconsin, Wauwatosa. He previously served as medical director of pediatric services and emergency medicine at Hoffman Estates Medical Center in Illinois.

Stella Patten, MD, a dermatologist, joined the medical staff of Marshfield Clinic. Dr Patten earned her medical degree from the University of Wisconsin, Madison. She completed a residency in dermatology at the Cleveland Clinic Foundation Department of Dermatology in Cleveland, Ohio.

Glenn Ragalie, MD, was appointed to the board of directors of St. Mays Hospital Milwaukee Foundation. Dr Ragalie is the former chief of staff and a staff physician at the hospital.

Margaret Roberts, MD, PhD, a physiatrist, also a lead physician for physical medicine and rehabilitation at the VA Medical Center, Milwaukee, has been appointed assistant professor of physical medicine and rehabilitation at the Medical College of Wisconsin. She earned her medical degree and a PhD degree in molecular biology and biochemistry from the University of Oklahoma-Health Sciences Center. Dr Roberts completed a fellowship in electrodiagnostic medicine, and a physical medicine and rehabilitation residency at the Medical College, serving as chief resident in physical medicine and rehabilitation in 1992. She is board-certified in physical medicine and rehabilitation and electrodiagnostic medicine.

Kaveh Sharif, MD, an internist, specializing in nephrology joined the medical staff of Bay Area Medical Center. He earned his medical degree and completed an internship training in Brussels, Belgium. Dr Sharif completed his residency at Mount Carmel Medical Center in Columbus, Ohio, and recently completed a three-year nephrology fellowship at the University of Michigan Medical Center in Ann Arbor. He is board certified in internal medicine.

Rick Stoughton, MD,*a family practitioner, joined the staff of Midelfort Clinic, Mondovi. He earned his medical degree from the University of Wisconsin Medical School, Madison. Dr Stoughton completed his residency at University of Wisconsin affiliated Appleton Family Practice Residency Program. He is board certified with the American Board of Family Practice.

Erich Quidzinski, DO,*a family practitioner, joined the medical staff of Luxemburg Medical Clinic. Dr Quidzinski earned his Doctor of Osteopathy degree in 1993 from the Chicago College of Osteopathic Medicine. He completed his residency at Lutheran General Hospital in Park Ridge, Ill. ❖

Obituaries

McGuire, George Edward, MD, 73, an orthopedic surgeon, from Tellico Village Community, formerly of DePere, Wisconsin and White Sulphur Springs, Mont. died December 20, 1996. Dr McGuire earned his medical degree from Marquette Medical School in 1946. He completed his internship and residency at Indiana University and St Vincent's Hospital. Dr McGuire was a former team physician for the Green Bay Packers and he practiced in the Green Bay area for 33 years. He was a member of the Brown County Medical Society and a 50 Year Club member of the State Medical Society, and a member of the American Academy of Orthopaedic Surgeons. Dr McGuire is survived by his wife, Nancy Jean; four children, Daniel McGuire, of Madison; Susan McGuire of St. Cloud, Minn; Kathleen McGuire of Wallkill, NY; and Mary Gallo, of Queensbury, NY; stepchildren, Kathryn Baptie, of Brookfield; Daniel Sayner, of Columbus, Ind; David Sayner, of Winfield, Ill; and Elizabeth Rosner, of Greenville; and 13 grandchildren.❖

Tributes to loved ones can help others

The memorial program of the SMS Foundation offers physicians a unique opportunity to provide a living memorial to a loved one or friend through a gift to the Foundation. A memorial contribution can provide financial aid to a needy medical student, help stimulate research on behalf of the public health or aid in the preservation of Wisconsin's medical history. When a memorial gift is made to the Foundation, the deceased person's family receives a special card with the name of the donor. For more information, contact the Foundation staff at the SMS.❖

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County Society News

Barron-Washburn-Burnett. Barron-Washburn-Burnett County Medical Society approved the following physicians for membership: Alexander Brothers, MD; Chris Kerr, MD; Richard Nagler, MD; John White, MD; David Bihrle, MD; Michelle Byron, MD; Daniel Lochman, MD; Janis McClelland, MD; Dilip Purohit, MD; John Terrell, MD; Ronald Veasley, MD.

Dane. Dane County Medical Society approved membership for the following: Ajay Bhargava, MD; Khalafalla Bushara, MD; Annette Chang, MD; Gorden Clark, MD; Michael Holt, MD; Daniel Icenogle, MD; Michelle Karsten; James Lairmore, MD; Edward Norman, MD; Stephen Smalley, MD; Judian Smith, MD; Heidi Swygard, MD; Heather Vallier, MD; James Verheyen; Russell Wilke, MD; Jeffrey Wood, MD; Gary Yap, MD; Almira Chabi; Jenifer Bassett; James Stein, MD; Richard Stewart, MD; Madelaine Tully.

Door-Kewanee. Swen J. Hilander, MD was approved for membership into the Door-Kewanee County Medical Society.

Manitowoc. Manitowoc County Medical Society approved the following physician for membership: Dean M. Lois, MD.

Milwaukee. The Medical Society of Milwaukee County has approved membership for the following: Arvind Ahuja, MD; Steven J. Donatello, MD; Christopher B. Griffin, MD; Kevin Eugene Halbert, MD; Michael I. Levin, MD; Ming-Kong Liu, MD; William T. Luckey, MD; M.J. Mishefske, MD; Sarah J. Pratt, MD; Mohammad E. Rassouli, MD; Pravin C. Sheth, MD; Edward P. Southern, MD; Aboud Affi, MD; Parakrama M.P. Ananta, MD; Jurica Bajic, MD; Michael Steven Boschek, MD; Heather Michelle Brown, MD; Elena Diana Burtea, MD; Robert Wood, Byrd, MD; Clodagh M. Cashman, MD; Li-Tai Chuo, MD, Kevin Richard Colwell, MD; Nancy Lynn Debbink, MD, Dana R. Diedrich, MD; Camellia Eshoa, MD; Hanna Eskinder, MD; John David Evanich, MD; David Charles Evans, MD; Mohammad N. Fareed, MD; Pawel Galazka, MD; Lorraine Marie Gauthier, MD; Sharon Elaine Gossett, MD; Timothy John Grass, DO; Joseph Patrick Hart, MD; David L. Hartsuch, MD; JoAnne Lynn Hill, MD; David B. Honari, MD; Chris Donnell Hower, MD; Viven Ramesh Huilgol, MD; Daniel Edward Johnson, MD; Michael Albert Johnson, MD; Joseph Peter Kim, MD; Christos Konstantelos, DO; J. David Lane, MD; Todd Matthew Larabee, MD; Jorge David Latoni, MD; Robert Raymond Leschke, MD; Robin Anne Marcus, MD; Li Qi-Qin, MD; Sean Patrick Mackenzie, MD; Abha Malhotra, MD; Thomas M. McGorey, MD: Robert Ajit Mittra, MD; Laura Elizabeth Poggel, MD; Peter Rhee, MD; Mark Rhyner, MD; Ritu Raj Sandhu, MD; Linus John H. Santo Tomas, MD; Timothy Dan Santoro, MD; Douglas L. Schulz, MD; Richard Lawrence Sellman, MD; Jesse Calvert Shick, MD; Carolyn Shannon Smith, MD; Ashraf Tamizuddin, MD; Raghavender Thunga, MD; Jennifer Ellen Tribble, MD; David Allen Wight, MD; Rebecca Sue Wolfer, MD; Leslie K. Alzuhn; Brenda J. Grass; Jean Hoopfer; Mark E. Kruck; Molly Martin; Christopher J. Ott; Hootan Roozrokh; Jeffrey Erick Stageberg; Terrence J. Endres; Susan Hammond; John David Kilde; Cynthia Lund; Faye P. Myers; Christopher A. Post; Barbara Slawski; Kristine Sue Wolf.

Oneida-Vilas. The following physicians were approved for membership by the Oneida-Vilas County Medical Society: Mark S. Balas, MD; Terri L. Marty, MD; William J. Simic, MD; James Zelinski, MD.

Outagamie. The Outagamie County Medical Society approved the following physician for membership: John P. Steinlage, MD.

Pierce-St. Croix. The Pierce-St. Croix County Medical Society approved the following physicians for membership: Kirk L. Jacobson, MD; George W. Leyda, Jr., MD; Taylor E. Neff, MD.

Portage. Portage County Medical Society approved the following physician for membership: Corliss Rupp, MD.

Sawyer. The following physicians were approved for membership by the Sawyer County Medical Society: Matthew Luedke, MD; Vicentiu Andrei, MD; Dayle Quigley-Malcolm, MD; Harry Malcolm, MD; Ann Wallace, MD.

Waukesha. The Waukesha County Medical Society approved the following physicians for membership: Manfred C. Chiang, MD; Gill Harinder, MD; Elizabeth A. Hallerman, MD; Anthony Hoang, MD; Susan D. Kretzschmar, MD; James A. Lamprakos, MD; Sanjay Singh, MD; George Yu, MD.

Wood. Wood County Medical Society approved the following physicians for membership: Edward A. Belongia, MD; Nancy Cressman, MD; Ramon A. Espada, MD; Jonathan W. Kern, MD; Lawrence G. Leibert, MD; Daniel M. Lucas, MD; Mark H. Winemiller, MD; William E. Yanke, MD; Bruce Brink, MD; Barry Edelstein, MD; Bradley Hiner, MD; Dale Larson, MD; Laurel Rudolph, MD; Michael Ryan, MD.❖

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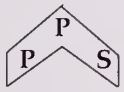

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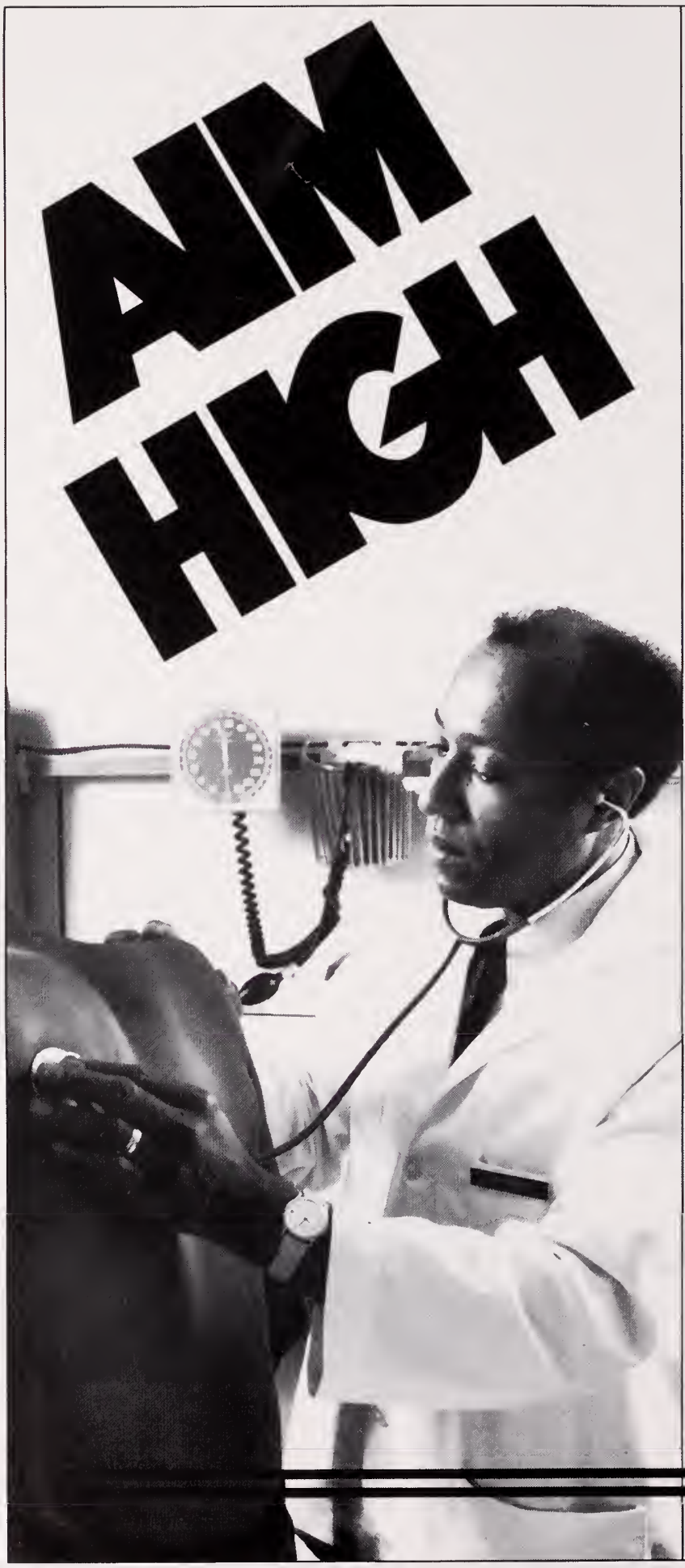

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Created by the Territorial Legislature in 1841 and now representing nearly 8,500 member physicians, the Society's purpose is to "advance the science and art of medicine and the health of the people of Wisconsin; ensure that physicians are equipped to deal effectively with the economic and political aspects of practice; and serve as the patient and physician advocate to government and other relevant publics." The major activities of the Society concern medical education, peer review, legislation, community health education, scientific affairs, socioeconomics, health planning, service to physicians, operation of the Charitable, Educational and Scientific Foundation, and publication of the *Wisconsin Medical Journal*.

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Our cover: The cover photo is a cancer-causing retrovirus seen from a Scanning Electron Mircoscope (SEM). The image was downloaded from the Internet courtesy of PC-Tumor Images, a pathology database run by John R. Minarcik, MD, at the University of Alberta, Department of Labatory Medicine and Pathology.

We chose this image because of the heavy emphasis on the research and technology of cancer reflected in the papers found in this issue of the *WMJ*, beginning on page 19.

Related articles are shown in the Table of Contents with the following symbol: and can be found on WISMED, the SMS world wide web site, at **www.wismed.com.** PC-Tumor Images is located at: http://synapse.uah.ualberta.ca/synapse/000p031q.htm.

President's Page
Stumbling on the Path of Human Progress

The February 1997 issue of *WMJ* featured an editorial by Wisconsin State Senator Fred Risser wherein he outlined the legislation he has introduced to "allow a physician to comply with a patient's desire for death with dignity in the most limited and narrow of circumstances." (See page 6, February 1997.) ***Editor's note:*** This issue is back in the news once again, as proposed federal legislation goes to the US House of Representatives the second week in April.

Senator Risser then detailed his proposal's "stringent safeguards." He went on to cite the "enormous public support on this issue (of physician-assisted suicide)." But does this not go against the basic principle that public policy should not be dictated by public opinion?

For hundreds of years, slavery was permitted in this country and supported by public opinion; it is obviously now against the law.

In Wisconsin, the majority of the public supports the death penalty for certain crimes; the state forbids the imposition of the death penalty. There is a fundamental issue of right and wrong, and that issue is now altered by public opinion.

Senator Risser makes much of the safeguards he has in his proposed law. The history of the euthanasia and assisted suicide movement going back to 1870 is replete with proposals containing safeguards against abuse of the proposal.

Mr. Samuel D. Williams in 1870 made his proposal to the Birmingham (England) Speculative Club that "in all issues of hopeless and painful illness it should be the recognized duty of the medical attendant whenever so desired by the patient to administer chloroform or such other anesthetic...so as to destroy consciousness at once, and bring the sufferer to a quick and painless death, *all needful precautions being adopted...to establish, beyond the possibility of doubt or question that the remedy was applied at the expressed wish of the patient.*"

In the US, in 1906, a bill was introduced in the legislature of Ohio for euthanasia, again with a list of safeguards. The bill was defeated.

In the Netherlands, euthanasia and assisted suicide are not legal, contrary to popular belief, but their government has decided in practice that physicians who terminate life on the request of the patient will not be punished.

The criteria required: An explicit and repeated request by the patient that leaves no reason for doubt concerning the desire to die; the mental or physical suffering of the patient must be very severe with no prospect for relief; that the patient's decision be well informed, free and enduring; that all options for other care have been exhausted or have been refused by the patient; and that the doctor consult another physician.

With all these safeguards in place, a study by Van der Maas *et al* entitled "Euthanasia and Other Medical Decisions Concerning the End of Life" published in *Lancet* in 1991, showed that in a prospective study of deaths attended by 322 Dutch physicians, 0.8% were due to actions by a physician to terminate life without an explicit and persistent request from the patient.

Richard H. Ulmer, MD

Jack Kevorkian, MD, has published an extensive list of criteria that must be satisfied before the performance of euthanasia or physician assisted suicide. A recent article in the *Detroit Free Press* reviewed the 45 deaths Dr Kevorkian has attended and found that the published criteria were not satisfied in many of them.

"Human nature never changes." This basic principle of human behavior is exemplified all around us on a daily basis. Legislators can create all the laws they can dream up, often in response to misguided and/or malformed public opinion. But the safeguards in laws as proposed by Senator Risser have been demonstrated clearly by human behavior around the world as being easily circumvented or denied, with fatal results for the unsuspecting recipients of the care provided under the law. ❖

Letters to the Editor

SMS Provides Means to Strengthen Advocacy

THE WISCONSIN State Medical Society's quest for new ideas for governance is both timely and appropriate. Over the years, it seems to me that more and more physicians question the relevancy of SMS to their practices, and this fact has weakened the relationship between physicians and SMS.

The communication between the society through field persons or county society meetings just has not seemed adequate. There are not enough physicians who seem to have an interest in the present governance structure.

The SMS mission should be expanded to promote our advocacy to strengthen the physician/patient relationship. SMS can do this by promoting studies of new technologies that empower physicians in their care of patients. This would make the society relevant to every physician and make it a much more powerful political force.

The historic relationship between corporate and clinical medicine has changed significantly over the years. As physicians, we initiate corporate medicine to help us in clinical practice.

As times have changed, large amounts of capital have been needed as technology has advanced and corporate medicine has had undue influence. As physicians, we need the SMS to be an advocate for the patient/physician relationship and to be at the forefront in the promotion of technologies to promote and strengthen it.

Only clinical medicine can deliver patient care. SMS is an ideal partner to help define the relationship between clinical and corporate practice that will deliver the best patient care.

--Walther W. Meyer, MD
Medford

Editor's Note: You are invited to attend a "Town Hall" meeting sponsored by the Task Force on Governance Structure at 1:00 p.m., Saturday, April 19, 1997 at the Regency Suites Conference Center in Green Bay during the SMS Annual Meeting.

The Task Force has been studying ways to revise the current governance body of the SMS to make it more responsive to member needs.

For more information regarding the Task Force on Governance Structure, contact Colleen Wilson at SMS ext. 261 or via e-mail at: COLLEENW@smswi.org.

Please contact Lisa Lawry at SMS ext. 358 or via e-mail at: LISAL@smswi.org for additional information regarding the Annual Meeting. ❖

Healers Cure, Care-givers Offer Curative and Palliative Care

I RECEIVED A COPY of the February issue of the *WMJ* and read through it with interest. It is good to see the problem of treating the terminally ill being discussed widely, especially after the disturbing findings of the SUPPORT report.

I particularly liked William Scheckler's contrast between the "Caring Imperative" and the "Therapeutic Imperative." (See page 10, February 1997.) As long as doctors define themselves as *healers*, as apparently many do, they are going to fail badly in their task. On the one hand they are going to be tempted to over-treat patients; on the other, when they finally recognize that further high-tech treatment is of no avail, they may 'wash their hands' of patients. There is much anecdotal evidence that this happens.

If however, doctors see themselves as *care-givers*, then they will be strongly motivated to heal, as long as healing seems to be a good possibility; but they will also be attentive to quality-of-life considerations, and not mere survival, when they have to decide about 'heroic' measures. And when no further hope of healing remains, the care they give will be just as intense, but it will be comfort care.

Presently it is widely reported that not just individual doctors, but the whole health-care community--from medical schools to hospitals, to the general body of doctors--is quite deficient in the two related, but not identical, areas of pain care and death-and-dying. Today, more and more people dread the possibility of being "subjected" to high-tech hospitals.

They say it takes a long time to turn a battleship around, but is my hope that with the present wide discussion, and with strong leadership from people like Dr Ulmer, getting this particular ship turned around will be done with vigor and dispatch.

--Brian Rice McCarthy, Retired Reverend, United Methodist Church, Madison

Guest Editorials

Each Woman Should Decide for Herself

(The controversy and confusion about mammography for women in their 40s continues...)

Marcia J. S. Richards, MD, Milwaukee

RECENTLY NEW DATA from randomized Swedish trials on screening mammography for women age 40-49 years became available. This prompted the director of the NCI to call a new consensus conference to reexamine the previous 1993 NIH decision to not recommend routine screening for women in their 40s.

Unfortunately, a confusing statement was crafted which prompted anger from several organizations, and a resolution from the US Senate urging the National Cancer Advisory Board to review the recommendations or encourage the public to consider other guidelines which recommend screening in this age range.

The consensus statement concluded that:

- available data did not warrant single recommendation for mammography for all women in their 40s
- insurers should cover screening mammograms for women in their 40s
- each women should decide for herself whether to undergo mammography
- we as physicians must be equipped with sufficient information to facilitate a women's decision-making process

And, last month, the American Cancer Society convened a workshop to consider the new scientific findings related to breast cancer screening, and to determine whether the new findings warrant a change in the existing ACS guidelines for the early detection of breast cancer.

The ACS concluded that the new data accumulated since the last review of the guidelines in 1993 had potentially positive implications for the overall benefit from mammography in women ages 40-49 and in particular, recommendations for periodicity of mammography in ACS guidelines.

Workshop participants concluded that the new data warranted the following succinct recommendation regarding mammography: the American Cancer Society recommends annual mammography for women beginning at age 40.

Any wonder that patients and their physicians are confused. What are the facts.

First, mammographic screening is meant for asymptomatic women who do not have risk factors for breast cancer. Mammograms need to be done on symptomatic or high risk women in their 40s. It is also accepted that yearly screening mammograms clearly reduce the risk of dying from breast cancer in women ages 50-69 years and should be performed.

Breast cancer is the leading cause of death in US women ages 40-49. However, breast cancer (both in situ and invasive) will be diagnosed in only 2% of women in this age range, and a women in her 40s has only a 0.3% chance of dying of breast cancer. The numbers are small (but the individuals well remembered).

Marcia J. S. Richards, MD

Mammography is not as sensitive in younger women because of their denser breasts, however, techniques continue to improve and this may not always be the situation. Sensitivity in the 40-50 year old age range is ~75-80%, which is ~10% less than the post-menopausal age range.

With this background, what is the new Swedish data for 40-49 year old women that prompted a review of current NIH recommendations?

First, a trial from Gothenburg (Sweden) demonstrated a statisti-

Dr Richards, SMS past president, is in private practice in Milwaukee where she is medical director of the section of radiation oncology at St Lukes Medical Center.

cally significant 44% mortality reduction in women screened every two years over the next 12 years of follow-up. They were compared with a control group who received routine care, which for some even included mammography.

A second trial from Malmo (Sweden) reduced mortality by 36% in women in their 40s invited for screening. However, neither of these trails showed any survival benefits for the first seven years.

When this data was put into a meta-analysis with previous screening trials for women in the 40-49 age range, it was concluded that together they now supported a 24% reduction in mortality from breast cancer for screened women.

So why was no clear recommendation given by the consensus panel? I believe the answer to this question is that we do not have an answer to a more fundamental question, which lies at the root of this, and many controversial medical interventions. This frequently unspoken question has not yet openly "come out of the closet." Where is the American society going to draw the line between societal cost and individual benefit?

The author in the Malmo trail concluded that 625 women would have to be screened to extend the life of one women, and the panel said the meta-analysis would require about 2,500 women to be screened to extend one life. Of course the financial costs for this gain include not only those for mammography on a population, but also for the tests to evaluate screening mammograms that are abnormal for reasons other than cancer.

My suggestion is that we request that the NIH convene a consensus panel that would be charged with answering the question, "How much should we spend to save one year of human life." In my opinion, only when we accept openly, and individually, that dollars are limited for potentially worthwhile medical interventions will we start to approach the delivery of medical care in a fair and rational manner.

In the interim, the NCI has left the choice to your patient, but with your help.

The NIH Consensus Development Conference Statement, "Breast Cancer Screening for Women Ages 40-49," can be found on the Internet at: http://www.consensus.nih.gov. ❖

THE UNIVERSITY OF CHICAGO MEDICAL CENTER

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Wisconsin Cancer Council

Paul Carbone, MD, Madison

The Wisconsin Cancer Council is a coalition of organizations dedicated to developing and coordinating a comprehensive cancer control program in Wisconsin. The Council's goal is to reduce the incidence and mortality from cancer in Wisconsin by:

- stimulating communication between cancer-related organizations,
- developing a coordinated cancer control plan for Wisconsin, and
- developing and coordinating inter-organizational cancer-control activities.

Background

The Wisconsin Cancer Council was started in 1985 and now includes 34 members representing 23 organizations including: the American Cancer Society-Wisconsin Division, American Lung Association of Wisconsin, Cancer Center of the Medical College of Wisconsin, Dean Medical Center, S.C., Gundersen Clinic, Ltd., Marshfield Clinic, McArdle Laboratory for Cancer Research, Medical College of Wisconsin, Physicians Plus, Sinai Samaritan Medical Center/ Milwaukee Clinical Campus of the University of Wisconsin Medical School, State Medical Society of Wisconsin, University of Wisconsin Comprehensive Cancer Center, Wisconsin Breast Cancer Coalition, Wisconsin Department of Health and Social Services, Wisconsin Department of Public Instruction, Wisconsin Hospital Association, Wisconsin Cancer Pain Initiative, Wisconsin Nurses Association, Wisconsin Oncology Group, Wisconsin Oncology Nurse Group, Wisconsin Pharmacists Association, Wisconsin Public Health Association, and Wisconsin Society of Radiation Oncologists.

The Council has been an important resource for cancer projects that have benefited the people of Wisconsin, namely in the areas of breast cancer awareness, smoking and tobacco issues, the cancer reporting registry, and pain control.

Activities

The Council focuses on coordinating cancer-related policy issues and developing collaborative cancer control activities among members. In 1987, the Council appealed to Wisconsin's Governor and legislature to allocate funds for cancer control projects relevant to state needs. Beginning in 1988, $400,000 was appropriated from general-purpose revenue funds to develop a Cancer Control Initiatives grants program. An additional $50,000 was allocated to upgrade the state's Cancer Reporting system. These funds have been available on an annual basis to support cancer control activities across Wisconsin. Plans are underway to improve this appropriation to provide ongoing support to the many cancer-related programs currently supported by short-term federal grant monies.

The Council continues to promote cancer-related legislation on concerns such as tobacco, health care access and early detection. In the past several years, the Council has supported legislation that restricts smoking in hospitals, increases the cigarette excise tax, prohibits the free distribution of cigarettes, and restricts youth access to cigarette vending machines. It has also supported the bills that strengthened the Clean Indoor Air Act and provided insurance coverage for screening mammograms.

Paul Carbone, MD

The Council collaborates with organizations on a variety of activities including implementing the Wisconsin public health plan promoting cancer control initiative activities, sponsoring cancer control conferences, and assisting members with statewide projects such as the Cancer Pain Initiative, DHSS/DOH breast and cervical cancer screening program, American Stop Smoking Intervention Study (ASSIST), Tobacco-Free Wisconsin Coalition, and Cancer Reporting System enhancements.

Future plans

During the year, the Council will collaborate with the Wisconsin DOH and ACS, implementing initiatives in cancer screening, tobacco control, cancer reporting, progress toward cancer-related objectives of the state public health plan, and promote cancer-related

Dr Carbone is Professor of Medicine Emeritus at UW and Director, University Comprehensive Cancer Center, UW Medical School, Madison. He sits on the Medical Schools/SMS Relations Committee.

legislation.

Future directions for the Council that will be critical to implement are in the areas of prostate cancer and genetics counseling. Taking the Council forward is Tom Anderson, MD, Professor and Chief, Division of Hematology/Oncology, Medical College of Wisconsin, the new Chair. Dr Anderson has also been named the American Cancer Society's Professor of Medicine for the next three years.

For more information, please contact Paul P. Carbone, MD, Immediate Past Chair, at (608) 263-8610, or Linda L. Hardy, Executive Director, at 1930 Monroe Street, Suite 302, Madison, WI 53711, (608) 265-4618. ❖

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An Ethical Walk Through a Long-Term Care Facility

Richard A. Dart, MD, Marshfield

MANY OF THE COMMON ethical problems are focussed on decisions to be made at the end of life. Since many of our patients will face those decisions in a nursing home, it would seem appropriate to address ethics in that setting. Consider the following scenarios:

Scenario A
Patient #1 is a 90-year-old white female who has had long-standing diabetes, and as a result of its complications is legally blind, has had one leg amputated and is mildly *azotemic* from presumed diabetic nephropathy.

Suddenly, she has what appears to be a stroke, and from there on is unable to swallow food without aspirating. The decision is made between the attending physician and the family that there should be no tube placement for nutrition and no IV therapy. After three days of no nutrition or hydration, a nurse at the home calls the district attorney's office and states that the patient is being starved to death and dehydrated! The DA investigates and asks you for an opinion. There is no advance directive.

Question 1.
Is it ethical to allow patients to die without artificial attention to hydration and nutrition?

Question 2.
In view of the patient's advanced age and having illnesses without the potential for cure, is resort to the "Futility Factor" appropriate and does it help to direct our course of action?

Scenario B
Patient #2 is an 84-year-old white female who has completed an advance directive and appointed a niece as her power of attorney for health care. In that document she states that she does not want CPR or hospitalization and requests attention to comfort measures only, in the case of an arrest.

Suddenly one day, the patient complains of a pain in her chest and collapses and is found to have EKG evidence of an acute myocardial infarction. The patient is afforded oxygen and a morphine drip is established and for the moment the patient seems comfortable and stable. The niece arrives later and is incensed that the patient is not in the hospital and threatens legal action if she is not hospitalized.

Question 1.
If you are the attending physician, what would you do?

Question 2.
Are you on safe legal grounds to rely on the advance directives as written?

Question 3.
Is age a factor? Would your actions be any different if the patient was 64 instead of 84? ❖

Tell us what you think

The *WMJ* wants to know what recomendations you would make. Please send us a brief note with your thoughts and recomendations to: State Medical Society of Wisconsin, Judith Burke, Managing Editor, P.O. Box 1109, Madison, WI 53701, or e-mail your comments to us at: **JUDITHB@smswi.org.** You can also send us comments via the "talkback" button on our web site **(www.wismed.com)**.

We'll publish a summary of your comments and the discussion from the Ethics Commission in the next issue of the *WMJ*.

The War on Cancer

Judith D. Burke, managing editor

My personal exposure to cancer has, fortunately, been quite limited. The closest I've come to dealing with it was when my college roomate's brother, diagnosed at age 15 with testicular cancer, took a turn for the worse.

During the ensuing years of treatment and remission and recurrence, I became familiar with the terms surrounding the illness: we talked about his blood count, chemotherapy treatment, secondary illnesses, bone marrow transplants (he had two) and finally, of loss.

When the numbers are repeated to us, they are staggering; I read 10 years ago, *"...one in nine American women will contract breast cancer."* I remember counting off nine friends and wondering which one of us would become a statistic.

The National Cancer Institute (NCI) estimates that approximately 7.4 million Americans alive today have a history of cancer. About 1, 382,400 new cancer cases are expected to be diagnosed this year, an estimate that does not include carcinoma in situ or basal and squamous cell skin cancers, over 900,000 of which are expected to be diagnosed in 1997.

In 1997, 560,000 Americans are expected to die of cancer, more than 1,500 people a day. One in every four deaths in the US is from cancer. Since 1990, there have been approximately 4 million cancer deaths.

The past half-century has shown a steady rise in cancer mortality in the US. The major cause of the increase: lung cancer. The American Cancer Society estimates that in 1997 about 174,000 cancer deaths are expected to be caused by tobacco use -- 174,000 deaths from cancer that could be totally prevented.

Other types of cancers that can be prevented are those caused by alcohol abuse, nutrition and many of the 900,000 skin cancers expected this year. Additionally, screening programs such as those you may offer your patients, can result in the early diagnosis of many types of cancers.

The costs of cancer

The financial costs of cancer are great both to the individual and our society as a whole. The NCI estimates overall costs for cancer at $104 billion; $35 billion for direct medical costs, $12 billion for morbidity costs, and $57 billion for mortality costs. Treatment of breast, lung and prostate cancers account for over half of the direct medical costs.

Twenty-five years ago, President Nixon declared war on cancer; $29 billion has been dedicated to research, yet many people believe that there has not been enough progress.

Research progresses

Funding at the federal level for cancer research is a high priority, and many researchers feel the work is going to pay off in the near future. Richard Klausner, MD, director of the NCI, acknowledges the frustration experienced by researchers, physicians and patients with the lack of cancer breakthroughs and the slow pace of research. But, Dr Klausner insists that scientists are only now making crucial headway into the genetics of cancer, headway that may hold the key for tomorrow's prevention and cures.

In addition to research, the NCI operates the Cancer Information Service (CIS), a nationwide network of 19 regional offices that provides a toll-free phone service (1-800-4-CANCER) offering accurate, up-to-date information to cancer patients and their families, health care professionals, and the general public. Through the outreach program, the CIS serves as a resource for state and regional organizations by providing printed materials and technical assistance to cancer education, media campaigns and community programs. (A wealth of information on cancer, for both clinicians and patients, can be found on the Internet on WISMED, the SMS World Wide Web site, www.wismed.com.)

As physicians, you see the devastating effects of cancer every day. You are at the forefront of the research and dialogue taking place. In Wisconsin, the research taking place today covers a broad spectrum of cancers and cancer treatments, at many different levels: from the university laboratory bench to public health initiatives, to outreach and education programs in local communities.

The *WMJ* brings you several papers beginning on **page 19**, that reflect the various research being conducted around the state.

And because cancer isn't just numbers and statistics and research, because there are people--someone's aunt, someone's brother, and your patients all--behind the disease, we've brought you a special discussion with a physician treated for prostate cancer **(see page 12)**, a report about the challenges of dealing with pediatric oncology **(page 14)**, and a discussion on the current mammogram screening controversy **(page 6)**.❖

A Conversation with a Physician *and* a Cancer Patient

Judith D. Burke, Managing Editor

Jules Levin, MD, is a Board-certified neurosurgeon from Milwaukee, who retired his neurosurgical practice following heart bypass surgery in 1983. He continued to work as a neurosurgical consultant on cases through January of 1992.

In 1985, Dr Levin's urologist found abnormalities pointing to a prostate malignancy. I spoke with Dr Levin about the ensuing illness and the treatment, and the way he handled being on the "other side" of the diagnosis.

JB: *"Dr Levin, do you think receiving a diagnosis of prostatic cancer was different for you than for a non-physician?"*

JDL: "No. Hearing that kind of news is a shock for anyone. However, being a physician, I realized that there are many types of malignancies with varying prognoses.

"I consider myself to be a fairly well-composed individual, so I didn't disintegrate on hearing the news. Instead, I set about trying to determine the best possible method of treatment available."

JB: *"What were your choices of treatment at that time?"*

JDL: "The two methods of treatment at that time were radical prostatectomy and radiation therapy. I researched the literature regarding each alternative, and found that the five-year outcomes were very similar. I didn't want to undergo major surgery again, having just had the heart bypass surgery, so I opted for the radiation therapy."

JB: *"Tell me what that was like for you and your family."*

JDL: "I received radiation therapy five days a week for seven weeks. I didn't let it interfere with my consulting practice. I felt that I had to make the best of the circumstances. To accomplish that, I continued to see patients and kept as regular a schedule as possible. I arranged to have my radiation treatments at 7:00 a.m. each morning and arrived at the office at about 9:00 a.m. ready for the day's work.

"My dear wife was concerned with the way I insisted on continuing with my regular schedule, but I just felt that I could not let this part of life become my entire life. I was fortunate that my wife was very supportive."

JB: *"That's truly admirable. Do you think that your outlook, your fight against this disease, was enabled by your training as a neurosurgeon? You know, you have achieved a certain socio-intellectual level that may not be accessible by the general public."*

JDL: "Yes, that is true. Of course my training as a physician, and especially a neurosurgeon, created a certain pragmatism and intellectual need to challenge in me. But even before I became a surgeon, way back in medical school and before, I was shaping a philosophy of life. I thought of it as shaping the structure of a piece of iron on an anvil: with every bit of heat, every stroke of the hammer, the shape is evolving. So it continually changed, and it has continued to change throughout my life.

"The field of neurosurgery is not one of creating happiness for the patient and his or her family. It wasn't like that of an obstetrician who brings life into the world, when each occasion is a blessing. The patients I treated were seriously ill. I tried to instill in them a tolerance of whatever fate decreed.

Jules Levin, MD

Like a poker hand, the measure of a human being isn't whether you hold four aces and a joker, but in simply playing the hand dealt to you to the best of your ability. That philosophy stood me in good stead when I became the patient."

JB: *"That sounds like a fabulous theory of life, but how did you put it into practice?"*

JDL: "By laughing a lot. I've always had an unusually good sense of humor, and I've nurtured it along all these many years. I've always held that laughter is good medicine. I'd prescribe laughter as daily medicine, and frequently repeated anecdotes to get my patients to laugh, even though sometimes it was through our tears.

"I've always emphasized that one just has to make the best of whatever happens, and interestingly enough, many of my patients believed me. I've always lived that way, and my illness did not change me or my philosophy. I do consider myself very blessed though--the

good Lord has been very kind to me."

JB: *"What would you like to tell your physician colleagues around the state who may be faced with a diagnosis similar to yours?"*

JDL: "First and foremost, when you hear the word 'malignancy,' you cannot think "that's the end!" Malignancies vary greatly in their progression and outcomes. You have to have the spirit of a fighter and as a physician you have a head start on most people.

"Diagnosis and treatment have progressed markedly in recent years. Do your homework and get all the current information about your illness that you can. You have resources available to you: use them! Engage the best oncologist you can find, and follow his or her advice. And above all, don't try to treat yourself, for remember the old adage: "He who is his own physician has a fool for a patient and a fool for a doctor!"

"Next, I'd say, have a good attitude about life right now, before you get sick, that way, you'll be capable of withstanding tragedy as well as the joys in life.

"If you haven't "stopped to smell the roses" as you travelled the road of life, begin STAT.

"Finally, you've got to be able to laugh at yourself; learn to do that now, if you haven't already. Sometimes, even you will be surprised at the outcome."

JB: "Thanks so much, Doctor Levin for sharing your story with us. I'm sure your courage and outlook will give our readers something to think about both in regard to their own lives and in the way they deal with their patients."

★ ★ ★ ★ ★

Dr Levin received his BA and MD degrees from the University of Wisconsin-Madison (1935 and 1938), and interned at the Wisconsin General Hospital. His neurosurgical training was completed at University of Minnesota Hospitals in Minneapolis (1941-1944, fellowship 1946-1948). Dr Levin served as a Captain in the US Medical Corps during WWII, from 1944-1946. He began the private practice of neurosurgery in Milwaukee in 1948.

Dr Levin served as president of the Milwaukee County Medical Society (MCMS) in 1972, was a Board member and Trustee of the SMS Foundation, and served as SMS President in 1977-1978. In 1984, he received the Special Presidential Citation from the State Neurological Society, and in 1987, he received the Distinguished Service Award from MCMS. He is a member of the SMS 50 Year Club, as well. ❖

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Treating Kids with Cancer

Marc Kennedy, special to *WMJ*

THIRTY YEARS AGO, a diagnosis of cancer for a child was a virtual death sentence. Today, more than 70% of children who develop cancer survive -- in the case of certain forms of leukemia, the success rate is more than 75%. This is due to advances in research, diagnosis, nursing and support care, and access to the latest therapies through regional pediatric medical centers with the expertise and specialized care necessary for treating childhood cancer.

But this success has not come without certain complications. Childhood cancer survivors are finding years later that they begin to experience late psychological, physiological and social issues related to their bout with the disease, not the least of which includes development of secondary tumors, concerns about fertility and the ability to afford health insurance as an adult.

Pediatric neoplastic diseases continue to afflict families across the country; but the spectacular strides in treatment are beginning to become less dramatic as resistance increases; and the incidence rate of cancer for children is beginning to rise, for reasons that remain unclear. In addition, pediatric oncologists are concerned that fewer children will be enrolled in clinical trials due to limitations placed on investigational protocols by the constraints of managed care. However, one national health care provider is promoting a plan to help encourage coverage of patients enrolled in pediatric oncology trials, and is hopeful that other carriers will follow suit.

Same therapies, different approach

When cancer strikes children, it behaves differently from cancer in adults. Children frequently have a more advanced stage of cancer when they are first diagnosed. Only about 20% of adults with cancer show evidence of metastasis at the time of diagnosis, yet 80% of children show that cancer has spread to distant sites in the body when the disease is first diagnosed.

Most adult cancers result from lifestyle factors, such as smoking, diet, occupation, and other exposure to cancer-causing agents. The causes of most childhood cancers, on the other hand, are not yet known, though some — such as retinoblastoma and Wilm's tumor — have been linked genetically.

". . . one of the concerns in the near future is that some referrals may be delayed due to restrictions placed by managed care and HMOs."

--Paul Gaynon, MD

Most adult cancers can be treated locally by a family practitioner with assistance from medical oncologists and radiotherapists. But addressing pediatric cancer demands involving an even larger team of experts, including pediatric oncologists, hematologists, oncology pharmacists, nurses with pediatric oncology training, social workers and others. Treating neoplastic disease also requires longer treatment protocols and monitoring for many years, which makes treating children with cancer more expensive and labor-intensive than treating adults.

Paul S. Gaynon, MD

Across the country, pediatric oncologists are on staff at an estimated 250 hospitals. Still, most children with cancer spend some time being treated at one of the 50 regional centers that specialize in childhood cancers such as leukemia, brain tumors, and neuroblastoma.

Pediatric cancers are treated with the same modalities used to treat adult cancer — chemotherapy, radiotherapy and surgery, as well as bone marrow transplantation in certain leukemia cases. However, after 30 years of increasing success against childhood neoplastic disease, the rising line on the outcomes chart has begun to plateau.

"In the last couple of years, we seem to have hit the wall with some of our chemotherapy protocols," says Paul S. Gaynon, MD, professor of pediatrics at the University of Wisconsin Comprehensive Cancer Center's pediatric oncology program.

"Cancer cells seem to be developing resistance to some of the

drugs. We used to trick them into basically killing themselves by continuing to try to divide and grow while exposed to the cytotoxins. Now we find that some cells will spend energy repairing the damage instead of reproducing. So we've begun tinkering with doses, combinations of different agents and delivery systems to overcome this natural resistance."

One of the most promising new therapies is immunotoxins, a new way to deliver chemotherapy agents or to enhance their potency. This method combines monoclonal antibodies, recombinant hormones, growth factors or receptors — used to target antigens on the surface of cancer cells — with cytotoxins. Because they specifically target the surface of the cancer cells, immunotoxins can be particularly potent against neoplasms otherwise resistant to chemotherapy. Clinical trials testing immunotoxins on patients are underway in several centers around the country, including the UW Comprehensive Cancer Center and UW Children's Hospital in Madison.

A key element in developing new therapies, says Gaynon, also the leader of the Children's Cancer Group's (CCG) acute lymphocytic leukemia strategy group, is finding ways to boost the cancer-killing capacity, while minimizing the side effects.

"We need to limit toxicity," he says, "to be smarter rather than tougher. We need to look more closely at host patient pharmacology, how individuals metabolize different drugs. This will help us develop new, more effective drugs and learn to use old ones better. It will also enable us to better identify those who are more likely to relapse, so we can alter the delivery system, or to modify the approaches to circumvent cancer's natural resistance to chemotherapy."

Down the road, Gaynon adds, gene therapy may play a role in fighting childhood cancer by inserting toxin into genes so rogue cells will kill themselves.

Referral system works

One of the reasons for the success in the fight against childhood cancer is the alertness of pediatricians and family practitioners in recognizing potential signs of cancer and their willingness to cooperate with regional pediatric cancer centers.

"Cooperation has been great,"

Continued on next page

Childhood Cancer: Rare But Still Too Common

Cancer is a relatively rare disease among children, occurring in one in every 330 children in the United States. However, it is still the primary fatal disease from age one to 19.

Though advances in research during the past 30 years have greatly increased the five-year survival rate of children who develop cancer, these diseases are far from being overcome.

Still, many children treated at medical centers that specialize in pediatric oncology are cured, more than 70%.

Adult cancers are primarily those of the lung, colon, breast, prostate and pancreas. Pediatric neoplasms occur mostly those in white blood cells (leukemias), brain, bone, the lymphatic system and as tumors of the muscles, kidneys and nervous system.

The incidence of childhood cancer has been increasing in recent years as well. At this point, experts can only speculate the reasons for this increase. A study, published in the August 1996 edition of the journal *Cancer* reviewed data on 12,000 children from nine cancer registries across the country, and reported a 1% annual increase for children age 14 and younger from 1974 to 1991 for all cancer.

Some pediatric oncologists believe the increase is actually due to better diagnostic techniques, such as using magnetic resonance imaging (MRI) and computed axial tomography (CAT) scans, and better reporting and identification of the diseases.

Paul Gaynon, MD, UW Children's Hospital in Madison, says he is not convinced that this accounts for the increase, and his colleague at Children's' Hospital of Wisconsin in Wauwatosa concurs.

"It may be due to genetics, certain genes running in families that make them more susceptible to cancer," says Hazem Mahmoud, MD.

"We are living longer, having more children that survive longer, so we may be seeing a higher incidence. Also, it may be due partly to viruses that affect oncogenes that are precursors to cancer, and possibly to environmental variables such as medications, drugs, irradiation, or infections that can alter the effectiveness of our immune systems.

"For example, we have seen in HIV patients more lymphomas occur. A compromised immune system could have led to the development of these diseases."

Survival rates for childhood cancer patients have increased 55.5% since 1974. Today, more than 70% of kids who develop cancer are disease-free after five years, according to the National Cancer Institute, while the mortality rate fell 44% from 1973 to 1993. This year, the NCI estimates that 8,300 children 14 and younger will develop cancer for the first time, and approximately 1,700 will die from the disease.

Continued from previous page

says Gaynon, "Most of the kids who need to are getting to centers.

"But one of the concerns in the near future is that some referrals may be delayed due to restrictions placed by managed care and HMOs."

"So far, that hasn't happened. Physicians know that it takes a team of experts to treat kids' cancer, more than are normally available at a general clinic. They are just not equipped with expertise and the staff. They can't afford to extend the time and effort it takes to care for these kids. So the kids are still getting referred, for now."

"Latent effects" of survivors a major concern

As therapeutic effectiveness increased over the last 30 years, so has the number of survivors; but many still face residual effects of their disease years later.

"It's great to see kids 10-12 years later for checkups," says Gaynon, "and finding that the biggest problem they are facing is learning to parallel park for their drivers test."

But unfortunately, childhood cancer survivors are facing psychological as well as some physiological problems, including threat of relapse or development of secondary tumors due to earlier therapy or genetics.

"We find that kids treated at a young age have gaps in memories from childhood when there were receiving treatment," he explains.

"Some were so young they really never knew what it was all about. Then, years later they find that they had been treated for cancer and never knew it! This can cause some psychological problems later in life."

But Gaynon and his colleagues at the pediatric oncology "Caring for Life" clinic monitor patients concerning latent problems from earlier therapies.

"Granted, when the kids were receiving therapy, oncologists were focusing on keeping kids alive, not what would happen 20 years later. But we're getting smarter, based on what we've learned from earlier therapies."

For example, kids who had received large doses of radiotherapy were developing secondary brain tumors. A recent study indicated that women who were treated as children for Hodgkin's with radiation have 75 times greater risk of developing breast cancer when compared to women of the same general population.

"As we got better over the years at delivering optimum amounts of radiation, we began seeing fewer problems. Recent results indicate that roughly 28 out of more than 3,000 kids treated with radiation nationally got secondary brain tumors."

"Former patients now in their 30s and 40s are beginning to present secondary cancers related to drugs or therapies."
--Hazem Mahmoud, MD

For patients treated in the 1970s who are beginning to reach young adulthood and middle age, the patterns of secondary cancers start emerging, and are providing background data that can help youngsters today who develop cancer.

"Former patients now in their 30s and 40s are beginning to present secondary cancers related to drugs or therapies," says Hazem Mahmoud, MD, associate professor of pediatric oncology and director of the pediatric oncology program at Children's Hospital of Wisconsin in Milwaukee.

"Through their experiences we are learning more about whether people are predisposed genetically to these problems, or other complications, including cardiac, sterility, and lung fibrosis, especially for those treated for Hodgkin's disease."

Hazem Mahmoud, MD

Gaynon adds that they have learned that certain drugs were also associated with secondary tumors over the years, and are learning to deliver them more effectively to mitigate side effects in treating neuroblastoma, Ewing's sarcoma, brain tumors and leukemia.

Late effects clinics involve counseling as well as routine checkups. "Former leukemia patients seem to get more moles later in life," says Gaynon. "There is some concern that they might be more susceptible to melanoma. So, we talk with them in the clinic about avoiding the sun, having moles checked periodically, etc."

Perhaps the most significant obstacles former pediatric cancer patients face is the fact that they indeed have survived the disease.

"One of the biggest problems for young adults who had cancer as kids is getting insurance," says Gaynon.

"Many insurers consider cancer as a pre-existing condition, and either only offer insurance at high rates or not at all; even when the

former patient is now perfectly healthy."

For example, one of his former patients was treated and cured of a brain tumor as a child. Years later, there was some concern about symptoms that might indicate the development of a secondary tumor. The insurance company refused to cover the cost of an MRI to positively diagnose the presence of a neoplasm because it considered cancer a pre-existing condition. "As it turns out, the family had to pay for it," he adds.

"Thankfully, there was nothing wrong; there was no tumor. But what if there was one? Who would end up paying for the treatment? The family would go bankrupt or the taxpayer would end up footing the bill."

Clinical trials are key

Such scenarios prompt pediatric oncologists like Gaynon and Mahmoud to call for changes in the health care delivery system: on one hand to ensure that people in need receive the therapy they require without going bankrupt, and on the other, to help enroll people into research protocols necessary to promote progress in fighting pediatric cancer.

Often, HMOs and insurance companies will automatically exclude any treatment that is construed in any way as "experimental." The problem is that for most children, therapy is experimental. It has to be.

"On one hand, it's fortunate that a small percentage of children develop cancer, but these relatively small numbers affect how clinical trials are run," says Mahmoud.

"With pediatric cancer, 75% of kids are treated with clinical trials. With adults, a single cancer center can conduct a trial, but with children, centers nationally need to collaborate to obtain sufficient numbers to make trials statistically valid."

Continued on next page

Wisconsin Pediatric Oncology Treatment Centers

Most adults with cancer receive therapy from their family physicians, who consult with appropriate regional cancer specialists in surgery, oncology, hematology and radiotherapy.

Children with cancer require special attention, and need the expertise of a team of specialists backed by clinical and laboratory scientists trained in caring for children with cancer.

Therefore, kids who develop cancer are infrequently treated by family physicians or pediatricians. Instead, they usually rely on teams of experts found in major children's hospitals, university medical centers and regional comprehensive cancer facilities. Contacts at these centers in Wisconsin are listed below.

Dorothy Ganick, MD
Bellin Memorial Hospital
725 South Webster Avenue
Green Bay, WI 54301
(414) 433-6025

Paul Gaynon, MD
University of Wisconsin Children's Hospital
UW Comprehensive Cancer Center
K4/4, Clinical Science Center
600 Highland Ave.
Madison, WI 53792-0001
(608) 263-8554

Hazem Mahmoud, MD
Midwest Children's Cancer Center
Children's Hospital of Wisconsin
1701 Watertown Plank Rd.
Milwaukee, WI 53226
(414) 456-4132

H. James Nickerson, MD
Marshfield Clinic - St. Joseph's Hospital
Department of Pediatric Hem-Onc
1000 N. Oak Avenue
Marshfield, WI 54449-5772
(715) 387-5511

L. Gilbert Thatcher, MD
Gundersen Clinic Ltd.
Department of Pediatrics
1836 South Avenue
La Crosse, WI 54601-5429
(608) 782-7300

Other Resources:
National Cancer Institute
Pediatric Branch
www.nci.nih.gov

Children's Cancer Group &
National Childhood Cancer Foundation
44o E. Hamilton Dr., Suite 300
PO Box 60012
Arcadia, CL 91066-6012
1-800 458-6223
www.ncf.org

Pediatric Oncology Group
c/o Dr. Sharon B. Murphy
645 N. Michigan Ave, Suite 910
Chicago, IL 60611
(312) 482-9144
www.pog.ufl.edu

Cancer Information Service:
1-800 4-CANCER

WebDoctor:
www.gretmar.com/webdoctor/oncologypediatric

Cancer News
http://cancernews.com

American Cancer Society
http://www.cancer.org

National Human Genome Research Institute
http://www.nhgri.nih.gov

CancerNet™ -- for patients
http://wwwicic.nci.nhi.gov/patient.htm

CancerNet™ -- for doctors
http://wwwicic.nci.nhi.gov/health.htm

Continued from previous page

This means more monitoring, more evaluation, more staff, and, of course, more expense. But, the experts say, it's all crucial to successfully treating the disease.

"The question clinical trials answers is 'does it work better than the gold standard?'" says Mahmoud.

"To determine this, we cannot run placebo, double-blinded therapeutic trials. We have to run randomized therapeutic trials. The majority of adults are treated with standard therapies. Kids are on clinical protocols, which can be expensive.

"The National Cancer Institute only has so much money," he adds. "It gets spread pretty thin."

Cost of clinical trials

Pediatric oncologists believe that the success rate in treating children with cancer is threatened by an increasing reticence by managed care organizations and HMOs to cover the costs of children entering more clinical trials, which require expensive preliminary studies for toxicity, efficacy, delivery methods, etc. Anything that smacks of experimental treatment raises a red flag, says Gaynon.

"There is standard care, according to prevailing knowledge and treatment," he explains, "then there is what they in the insurance industry calls 'medically necessary care.'

"Standard care is a treatment plan that is commonly advocated by experts, and has supporting data. But with the medically necessary designation, insurers say they must have independent efficacy for each step. But you can't always prove every last detail, especially for children's therapy; the hard data's lacking.

"The decisions are often based on anecdotal and practical experience; for example, determining the number of doses of vincristine prescribed for an ALL patient. Not enough data exists empirically to reach a decision. Is it the right decision? In most cases, yes. But without the hard data backing it up, many insurance companies won't cover it."

"One of the biggest problems for young adults who had cancer as kids is getting insurance."

--Paul Gaynon, MD

To develop new therapies, it's crucial to conduct clinical trials, no matter the expense, the oncologists say. And, they can be worth it, in terms of discoveries made that will increase successful treatment of cancer for adults as well as children. For example, Mahmoud says, treatments for diseases such as Burkitt's lymphoma and B-cell ALL in adults have come from clinical trials on children.

"Two or three years of treatment for curing leukemia in a child can reap 60 years of life," says Gaynon, "as opposed to treating high blood pressure. To save one year of life for one person, you have to treat the equivalent of 900 patient years.

"Treating childhood cancer offers the second highest benefit, only behind smoking cessation counseling."

The costs of clinical trials may be high in the short run, adds Mahmoud, but the long-term benefits are invaluable.

"Some protocols for children require expensive monitoring, but it is the way we improve therapy and limit morbidity," he says, and pave the way to help more adolescent and adult cancer patients survive in the future.

"The only way to run Phase III trials, to test the efficacy of promising therapies, is to conduct Phase I and Phase II tests.

"But when they see this, some insurers won't cover the costs. Without new Phase III trials, fewer patients will be cured, and many will develop serious medical problems requiring costly extended care and hospitalization."

There is hope, however. One national insurer, Blue Cross Blue Shield, is introducing a new plan, the Pediatric Cancer Network. The network is designed to work with the NCI and approved pediatric cancer centers to enroll children into therapeutic protocols.

"The network was announced last spring," according to Blue Cross spokesperson Iris Shaffer.

"We are now in the process of getting contracts signed, and formalizing relationships with the various cancer centers.

"We understand that insurers typically have been apprehensive about covering patients in clinical trials. But we also understand that for pediatric cancer patients, that's where you get the best results. And Blue Cross is committed to providing our insureds with the best care."

Shaffer adds that Blue Cross is hoping that this network will become a model for other insurers will recognize its merits and begin to cover the costs of clinical studies for their children diagnosed with cancer.❖

Symptom Management for Incurable Head and Neck Cancer

Thomas M. Kidder, MD, FACS, Milwaukee

Abstract
The overall cure rate for cancer of the head and neck is about 50%. For those patients who will die of their disease, active palliative care is needed. This article seeks to present a practical approach to managing the symptoms, especially pain, suffered by patients with incurable malignancy. (See related article, Using Opioids to Control Suffering: A Painstaking Approach, on page 20 of the February, 1997 *WMJ*.) While the focus is on head and neck cancer, the principles and much of the information contained herein is applicable to patients dying from other types of malignant disease.

Introduction
Newly diagnosed cases of head and neck cancer number about 67,000 per year in the United States, excluding skin cancers; the overall 5-year survival rate is a dismal 50%, regardless of treatment modality employed. Even though relatively uncommon in contrast to other more common malignancies (e.g., lung, colon, breast, prostate), head and neck cancer is challenging to manage because of its high profile, severe functional impairments, and significant pain.

Incurable malignant disease is defined as cancer which has progressed beyond the point where cure or remission can be reasonably expected. Once this point is reached, the focus shifts from cure of the disease to control of symptoms, from curative treatment to palliative care.

A survey by Daut and Cleeland of patients dying from a variety of cancers (not just head and neck) found that 25% of those surveyed died with unrelieved pain. Another study by Marks, et al, of cancer inpatients on opioids found that 32% continued to have severe distress and 41% continued to have moderate distress. The obvious conclusion: For a significant number of patients with pain due to malignancy or the treatment thereof, adequate pain control is not being achieved. This in spite of compelling evidence from cancer pain specialists, and contrary to the assertions of proponents of euthanasia and physician-assisted suicide, that pain in well over 90% of cancer patients can be satisfactorily controlled with relatively simple, usually pharmacologic measures. The other 10% or fewer of patients may require additional modalities such as radiation, chemotherapy, surgery or anesthetic techniques.
Several characteristics of head and neck cancer distinguish it, especially when it is advanced or incurable, from malignancies in other sites. Histopathologically most often squamous cell carcinoma, it occurs in a highly sensate part of the body where many anatomic structures are concentrated within a small space. Bone pain and neuropathic pain are very common but poorly responsive to opioids alone. Receptors for a variety of pain stimuli (pressure, temperature, chemical) densely populate the tissues of the head and neck, and the afferents subserving these tissues course through several cranial and peripheral nerves. This limits the usefulness of nerve blocks and neurosurgical ablative techniques in controlling pain from head and neck cancers.

Head and neck cancer frequently interferes with functions such as speech, swallowing, taste, olfaction, secretion control and breathing. Neoplasms in this area

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are not easily concealed and, in advanced lesions, fungating tumors with their adverse psychological effects on the patient, family and caregivers as well as the hygienic problems they pose, create additional suffering for the patient. Lastly, patients with incurable head and neck malignancies may live for many months or even years, necessitating a longer term approach to their problems.

The paramount objective is elimination or, at a minimum, adequate control of pain. Other important considerations in palliative care include recognition and management of cachexia, infection, dyspnea, hypercalcemia, CNS aberrations, depression, anorexia, fever, swallowing disorders, constipation, personal hygiene and relief of suffering.

Chronic malignant pain differs significantly from acute pain (e.g., immediate postop pain) or chronic non-malignant pain (e.g., arthritis). Acute pain does not, and chronic non-malignant pain rarely if ever justifies long-term strong opioid therapy. Chronic malignant pain is progressive, irreversible, cyclic (varying from aching to agonizing), intractable, and conveys a sense of hopelessness to the patient. Cancer pain is classified as somatic/visceral (nociceptive) or neuropathic (deafferentation); it is essential to distinguish between these types of pain since the treatment for one type may not be effective for the other. Bone pain is a special type of nociceptive pain and is common in head and neck cancer.

Although the focus of this article is on head and neck cancer, most of the material contained herein is applicable to the management of patients with advanced cancer of virtually any site or type.

Definitions

Efficacy is the capacity of a drug to produce a given effect. *Potency* refers to the amount of a drug necessary to produce a given effect; e.g., morphine and hydromorphone are equally efficacious, but hydromorphone is more potent, since, milligram for milligram, it takes less hydromorphone to provide the same degree of analgesia as morphine.

Half-life is the time required to clear one half the administered dose of a drug from the plasma or body. *Duration of action* is the approximate number of hours that pain relief is afforded by a single therapeutic dose of the analgesic. Half-life and duration of action for a given drug are frequently not the same; e.g., the plasma half-life of methadone averages 24 hours, but its duration of effectiveness is only four to eight hours. Repetitive dosing with methadone at short intervals, therefore, may result in undesirable accumulations of drug in the body.

Physical dependence is the biochemical/physiological adaptation of an organism whereby normal functioning depends on the continued administration of a substance (e.g., insulin in a diabetic). It is physical dependence that results in withdrawal reactions upon abrupt cessation of an opioid after chronic administration. *Addiction*, in contrast, is drug-seeking behavior or a craving which has a goal other than that of pain relief. This important distinction must be clearly understood. *Tolerance* is the property of a drug to yield decreasing efficacy over time at a constant dose; tolerance is characteristic of opioids but does not occur with NSAID's and tricyclic antidepressants.

Ceiling effect is that dose of a drug beyond which further increments yield no additional analgesia. Non-opioid analgesics and weak opioids all share this limitation. Strong opioids (including oxycodone) have no ceiling effect, so the dose of analgesic may be increased indefinitely to compensate for tolerance or increasing pain, the limiting factors being side effects and toxicity.

Withdrawal or abstinence syndromes occur when drugs such as opioids, benzodiazepines, propoxyphene or barbiturates are abruptly discontinued. These syndromes are characterized by a variety of signs and symptoms including pain, anxiety, irritability, insomnia, cramps, nausea, vomiting, rhinorrhea, lacrimation and multifocal myoclonus. Withdrawal reactions may also be precipitated by the administration of opioid antagonists (naloxone) or mixed agonist-antagonists (e.g., pentazocine) to patients receiving chronic opioid therapy. If reduction in dosage or discontinuation of these agents is undertaken, it should be done gradually.

Principles

The fundamental concept that underlies successful pain management is: the right analgesic at the right dose at the right time, to maximize relief of suffering and minimize adverse side effects. This concept finds practical application in the following principles:

1) Believe the patient regarding the severity of pain.
2) Administer analgesics on a regular, fixed-time dosing schedule.
3) Adjust dosing promptly to control pain and mitigate side effects.
4) If pain control is not adequate, do increase the amount of analgesic per dose -- don't decrease dosage intervals.
5) Use the most convenient form of medication and route of administration (enteral preferable to parenteral, if feasible).
6) Employ adjuvant medications to augment symptom control.

7) Anticipate and take measures to prevent side effects of symptom therapy.

8) Continually monitor the efficacy of the regimen and adjust as needed; palliative care is active and intensive, not passive.

9) Make the treatment plan flexible enough to deal with breakthrough pain and to provide rescue doses of analgesic.

10) Reject fears of addiction as irrelevant and impedimentary, and counsel the patient, family and other caregivers in this regard.

Barriers

A number of barriers stand in the way of optimal symptom management in the patient with advanced cancer. "Opiophobia" refers to the fear that the patient may become addicted; that potential side effects, such as respiratory depression, countermand the prescription of adequate doses of analgesic; or, that prescribing long-term, high-dose opioids may invite censure by state or federal authorities.

Lack of knowledge about analgesic and adjuvant drugs useful in chronic malignant pain, and erroneous ideas, such as "pain goes with the territory," "pain builds character," or that cancer pain is so terrible that it can't be controlled, contribute further to the undermedication of the incurable cancer patient.

Lastly, the involvement of multiple caregivers often obscures the issue of who really is responsible for the overall management of the patient, resulting in discoordinated and delayed intervention.

Analgesics

Analgesics useful for chronic malignant pain have been classified in a three-step ladder by the World Health Organization. On the first step are the non-opioids: aspirin, acetaminophen, and NSAIDs. For moderate pain (second step), the weak opioids: codeine, propoxyphene, hydrocodone, and oxycodone (when combined with aspirin or acetaminophen). Tramadol, a new non-classified analgesic, is included on this second step. For severe pain (third step) the strong opioids: morphine, hydromorphone, methadone, levorphanol, fentanyl, and oxycodone (as a single agent). A working familiarity with two or three drugs on each of these "steps" will equip the physician to effectively control pain for most incurable cancer patients.

Appropriate analgesic usage requires knowledge of: the drug's indications and effects; duration of action; metabolism and excretion; routes of administration and available forms of the drug; side effects; and, interactions with other drugs.

The oral or enteral route of administration is preferred. Rectal, subcutaneous, intravenous, transcutaneous, intramuscular, or intrathecal administration may be necessary under some circumstances.

Major analgesics (strong opioids)

The mainstay and gold standard for treating severe chronic malignant pain is morphine -- no analgesic is more efficacious. It is available in a variety of forms and concentrations, and there is no absolute limit on the maximal dose that can be administered (i.e., no ceiling effect). Although tolerance to a given amount of morphine may develop, the dosage may be titrated upward to achieve control of pain. Other side effects such as constipation (to which, unfortunately, patients do not develop tolerance!), sedation and nausea can usually be offset by simple therapeutic adjuncts. Hydromorphone is virtually identical to morphine in its effect but is more potent, i.e., hydromorphone 1.5mg IM = morphine 10.0mg IM.

Oxycodone is now available as liquid, immediate-release tablets, and controlled-release tablets. While originally listed as a weak opioid, as a single agent (i.e., not combined with aspirin or acetaminophen) oxycodone has no ceiling effect and possesses the activity and properties of a strong opioid.

Methadone may be useful for patients who do not tolerate morphine. The former has a longer duration of action but does have some drawbacks. Methadone exhibits peculiar pharmacokinetics and has a long half-life. Plasma levels do not correlate well with analgesic efficacy and doses should be escalated cautiously. Concurrent use of barbiturates reduces the effectiveness of methadone. While methadone is efficacious in the management of chronic malignant pain, its prescription is best reserved for physicians experienced in its use.

A recent innovation in the therapeutic armamentarium is the use of transcutaneous medication. Transdermal fentanyl is a synthetic opioid supplied from a skin patch delivery system over a 48- to 72-hour period. There is a 12-hour lag period before stable plasma levels of fentanyl are reached; fever may result in higher plasma levels than when the patient is euthermic. The patches are designed to release 25, 50, 75 or 100 micrograms per hour, and more than one patch can be applied simultaneously. Furthermore, transdermal fentanyl can be easily used in conjunction with oral or parenteral opioids to achieve very satisfactory pain control. This is a promising innovation in simplifying delivery of opioid analgesics.

Partial agonists

Buprenorphine theoretically offers advantages over morphine. It is a synthetic Schedule V partial agonist opioid analgesic which is 30 times more active than morphine

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in relieving pain and is slowly released from receptor sites, making it effective for six hours or more. It causes few psychotomimetic effects and has a wide margin of safety. Experience to date, however, has failed to recommend buprenorphine as appropriate for the treatment of chronic malignant pain.

Rescue dose

Breakthrough pain occurs either as tolerance develops to a given dose of opioid or because the disease has progressed. Tolerance is usually heralded by the patient's noticing reduced duration of pain relief from a previously effective dose of analgesic. If breakthrough pain occurs, assuming other treatable causes have been ruled out (e.g., abscess, obstructed viscus), the analgesic should be increased by 20%-30% of the total daily dose. Adjuvant drugs can also be added to potentiate the effects of the opioid. A rescue dose of the opioid, usually morphine, about 10% of the total daily opioid dose, can be administered on a prn basis.

For catastrophic emergencies, such as exsanguinating hemorrhage or acute airway obstruction which the patient is not likely to survive, the prompt administration of morphine and scopolamine or midazolam may allay the panic and terror attendant upon such an event.

Bone pain and neuropathic pain

Bone pain, a type of nociceptive pain, is very common in head and neck cancer and frequently poorly responsive to opioids alone. It results from direct invasion of or metastasis to bone. Combining an opioid with aspirin, an NSAID, indomethacin, phenylbutazone or a corticosteroid is often gratifyingly effective in relieving this debilitating form of somatic/visceral pain. If there is concern about platelet dysfunction or gastric ulceration, choline magnesium trisalicylate or salsalate may be substituted.

Neuropathic (deafferentation) pain, like bone pain is common in advanced head and neck cancer and does not usually respond well to opioids alone. However, the addition of anticonvulsants (carbamazepine, phenytoin), antispasmodics (baclofen, clonazepam), or orally-administered antiarrhythmics (mexilitine, ticlainide) to the opioid regimen is often efficacious.

Inappropriate analgesics

Brompton's cocktail, originally concocted of heroin, cocaine, chloroform, water and ethanol, has been shown by Melzack to be no more efficacious in controlling pain than elixir of morphine in flavored syrup. This and other studies have also demonstrated no advantage of heroin over morphine; arguments to legalize heroin are more political than scientific.

Two drugs not recommended for chronic malignant pain are meperidine and pentazocine. Meperidine, while very useful for acute pain, has little or no place in alleviating long-term cancer pain. Its half-life is short and effectiveness when taken orally is inconsistent. Meperidine is metabolized to normeperidine, which accumulates in the plasma and causes undesirable neuromuscular side effects. Pentazocine, a mixed agonist-antagonist, is absorbed erratically when taken orally, but more importantly, has adverse side effects at therapeutic doses. As a general rule, mixed agonistantagonist opioid analgesics (e.g., nalbuphine, butorphanol, pentazocine) have no place in the management of chronic malignant pain.

Other symptoms in advanced cancer

Nausea and vomiting (N&V) are common in these patients. Causes of N&V include: analgesics; chemotherapy or radiation therapy; electrolyte disturbances; hypercalcemia; intercurrent illness; steroid therapy; adrenocortical insufficiency; meningeal metastases. Any of four anatomic locations may give rise to N&V. The vomiting center and the chemoreceptor trigger zone are located within the medulla. Higher cortical areas can initiate N&V; e.g., a particular odor or sight associated with prior chemotherapy sessions may trigger an emesis in a patient receiving cisplatin, even before the drug is administered. Vestibular system disturbance can induce N&V, especially in ambulatory patients receiving opioids. Lastly, peripheral, cranial and autonomic afferents can stimulate N&V by transmitting noxious stimuli to the central nervous system.

Determination, if possible, of the cause of N&V guides selection of the most effective antiemetic therapy. Categories of drugs with antiemetic properties include: phenothiazines; antihistamines; anticholinergics; butyrophenones (e.g., haloperidol, droperidol); corticosteroids; and, others such as metoclopramide, dronabinol, and ondansetron. Because of the site-specific actions of the antiemetics, it helps to be aware of the likely mechanism for the N&V and of the indications for use of a specific antiemetic.

Hypercalcemia, occurring with some head and neck cancers, portends a short life expectancy and is easily overlooked because of its insidious presentation. Some neoplasms secrete parathormonelike substances or, if metastatic to bone, elevate serum calcium levels by increasing osteoclastic activity. The more common symptoms of hypercalcemia include constipation, nausea, vomiting, renal dysfunction and mental changes. These symptoms are often ascribed to the disease itself or to the side effects of analgesics. Serum calcium levels should be obtained in patients

who have these symptoms; levels 15% or more above normal are usually symptomatic. Management can include hydration, furosemide diuresis, plicamycin, corticosteroids and/or diphosphonates. An endocrinology consult is advisable.

All patients receiving opioids are at high risk for constipation. Poor hydration, low dietary fiber and lack of exercise are contributing factors. Paradoxically a fecal impaction may present as diarrhea or fecal incontinence. Virtually all patients on long-term opioid therapy should be on a prophylactic bowel regimen, and digital rectal examination should be performed if an impaction is suspected. A practical bowel regimen could consist of any combination of the following, depending on the severity of the condition:

1) stool softeners
2) bowel stimulants
3) enema
4) suppository

Fevers due to infection should be treated with antipyretics, appropriate antibiotics and drainage, when necessary. Some fevers are not infectious in origin but are tumor-induced and mediated by prostaglandins. Aspirin, NSAID's and/or corticosteroids will provide symptomatic relief.

Uncontrolled pain is frequently a major cause of anorexia. Other common causes are the side effects of opioids and other drugs, and the anxiety and depression attendant upon malignancy. Moderate doses of corticosteroids, usually methylprednisolone or dexamethasone, along with careful attention to the selection, preparation, portion size and presentation of food may help to ameliorate this symptom. Anorexia, however, still remains a formidable problem in these patients, often leading to cachexia and death.

Analgesic adjuncts

Phenothiazines are among the most effective antiemetic agents. They function as apomorphine inhibitors and act primarily on the chemoreceptor trigger zone in the medulla. In addition to relieving nausea and vomiting, the phenothiazines provide sedation, anxiolysis, and potentiation of opioid analgesics. Caution needs to be exercised in their use because of their potential for causing oversedation, hypotension and anticholinergic and extrapyramidal side effects.

Vestibular-related nausea, especially prevalent in ambulatory patients receiving opioids, is often relieved by the use of antihistamines (e.g., meclizine, diphenhydramine, dimenhydrinate, hydroxyzine) alone or in combination with a phenothiazine.

Tricyclic antidepressants (amitriptyline, imipramine, doxepin, nortriptyline, desipramine) potentiate opioid analgesia, provide nocturnal sedation, and may allow some reduction in opioid dosage. Attention must be paid to potential anticholinergic and hypotensive side effects. These agents are used not so much as antidepressants (such antidepressant effect usually requires higher doses and may take two to four weeks to occur) but for their synergistic effect with analgesics in providing pain relief.

Fernandez, in a study of 500 cancer patients over four years, found that small doses of methylphenidate tended to improve memory, affect, concentration and attention span; he found it effective in treating depression, cognitive impairment and failure to thrive. He noted a rapid therapeutic response, few side effects and started with 5-10mg/day. He avoided dosing after about 2:00 p.m. and counteracted jitteriness or nervousness with low doses of lorazepam or propanolol.

Corticosteroids, especially dexamethasone and methylprednisolone, have several uses as adjuvants. They provide an initial euphoriant effect, tend to stimulate appetite, are antiinflammatory and ameliorate hypercalcemia.

Nitrous oxide/oxygen inhalation, in a 50/50 mixture, can be a valuable analgesic aid when uncomfortable procedures such as dressing changes, fecal disimpactions or wound debridements are performed. The analgesia is rapid in onset and short-acting. Some concerns have been raised, however, about the deleterious effects on health care workers of prolonged exposure to nitrous oxide. An effective gas scavenging and ventilation system in the treatment room will obviate this potential hazard.

Surgical adjuncts

Three very useful surgical interventions which can offer significant comfort and palliation to patients with incurable, advanced head and neck cancer are: tracheotomy; feeding enterostomy (either formal gastrostomy or percutaneous endoscopic gastrostomy); and, intravenous access (Hickman or similar long-term IV catheter). An indwelling intravenous line can accomodate a portable infusion pump, which can be used to administer opioid analgesics in patients whose pain cannot be controlled by enteral administration, or for administration of chemotherapeutic drugs or antibiotics. Most importantly, these procedures -- aside from their great usefulness -- should be anticipated and performed early, before the patient urgently needs one or more of them.

Summary

Palliative care focuses on the relief of suffering -- on how well, not how long, the patient will live. It requires active, intensive care char-

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acterized by frequent evaluations of the patient's needs and of the efficacy of treatment. Pharmacotherapy is available and highly effective; it should be used liberally and knowledgeably. Barriers to the successful management of chronic malignant pain must be recognized and not allowed to interfere with appropriate patient care.

References

1. Choucair AK. Pharmacological therapy for cancer pain. *Marshfield Clinic Bulletin*, No. 25:121. (Marshfield Medical Press, 715-389-3331).
2. Daut RL, Cleeland CS. The prevalence and severity of pain in cancer. *Cancer*. 1982;50: 19131918.
3. Doyle D, Hanks GWC, MacDonald N, eds. *Oxford Textbook of Palliative Medicine*. Oxford:Oxford University Press;1993.
4. Ettinger AB, Portenoy RK. The use of corticosteroids in the treatment of symptoms associated with cancer. *J Pain Symptom Mgt*. 1988;3(2):99-103.
5. Foley KM. The treatment of cancer pain. *N Engl J Med*. 1985;313:84-95.
6. Fernandez F, Adams F. Methylphenidate treatment of patients with head and neck cancer. *Head & Neck Surgery*. 1986;8(4):296-300.
7. Goldstein JC, Shedd DP, Sisson, Sr GA, Tucker HM. Management of the patient with terminal head and neck cancer. In: Fee, JrWE, Goepfert H, Johns ME, Strong EW, Ward PH, eds. *Head and Neck Cancer*. Philadelphia, PA: B.C. Decker, Inc; 1990;2:419-426.
8. Kornell J, ed. *Pain Management and Care of the Terminal Patient*. Wash State Med Assoc. (2033 Sixth ave., #900, Seattle, WA 98121).1992.
9. Levy MH. Pain management in advanced cancer. *Seminars Oncol*. 1985;12(4):394-410.
10. Marks R, Sachar E. Undertreat-ment of medical inpatients with narcotic analgesics. *Ann Intern Med*. 1973;78:173-181.
11. Melzack R. The tragedy of needless pain. *Scien Amer*. 1990;262:27-33.
12. Olsen KD, Creagan ET. Pain management in advanced carcinoma of the head and neck. *Am J Otolaryngol*. 1991; 12: 154- 160.
13. Pashley NRT. Practical palliative care for the patient with terminal head and neck cancer. *J Otolaryngol*. 1980;9(5):405-411.
14. Portenoy RK. Practical aspects of pain control in the patient with cancer. *Ca-A Cancer Journal for Clinicians* (AmerCaSoc). 1988;38:327-352.
15. Ralston SH, et al. Cancer-associated hypercalcemia: morbidity and mortality. *Ann Int Med*. 1990; 112:499-504.
16. Tuttle CB. Drug management of pain in cancer patients. *Can Med Assoc J*. 1985;132:121-134.
17. Walsh TD. Control of pain and other symptoms in advanced cancer. *Oncology*. 1987;1(2) (suppl).
18. Wanzer SH, Federman DD, Adelstein SJ, et al. The physician's responsibility toward hopelessly ill patients. *N Engl J Med*. 1989;320(13):844-849.
19. Wittes RE, ed. Roundtable: managing the side effects of cancer and cancer treatment. *Oncology*. 1989;3(8) (suppl):5-36.
20. *Management of Cancer Pain: Clinical Practice Guideline #9*; U.S. Department of Health and Human Services, AHCPR Publication No. 94-0592; March, 1994. (Write to: AHCPR Clearinghouse, Cancer Pain Guideline, P.O. Box 8547, Silver Spring, MD 20907). ❖

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Computed Axial Tomography Pancreatitis: An Atypical Asymptomatic Postoperative Disease without Serum or Urinary Enzyme Evaluation

J.S. Mayersak, MD; Carl J. Viviano, MD; and Joseph W. Babiarz, MD, Wausau

Key Words: Postoperative atypical pancreatitis, nomal amylase and lipase, absent clinical symptoms, diagnosis esablished by CAT scan.

Abstract

A case report of atypical postoperative pancreatitis following radical prostatectomy without any clinical symptoms is presented. The patient was asymptomatic in the postoperative period with regards to pancreas disease. Serum lipase, serum amylase and urinary amylase were normal. There was no history of alcoholism or biliary disease. The diagnosis was made by a CAT scan performed for an unrelated indication. The patient was followed for 17 months postoperatively. The pancreas CAT scan appearance returned to normal. No definitive treatment was given.

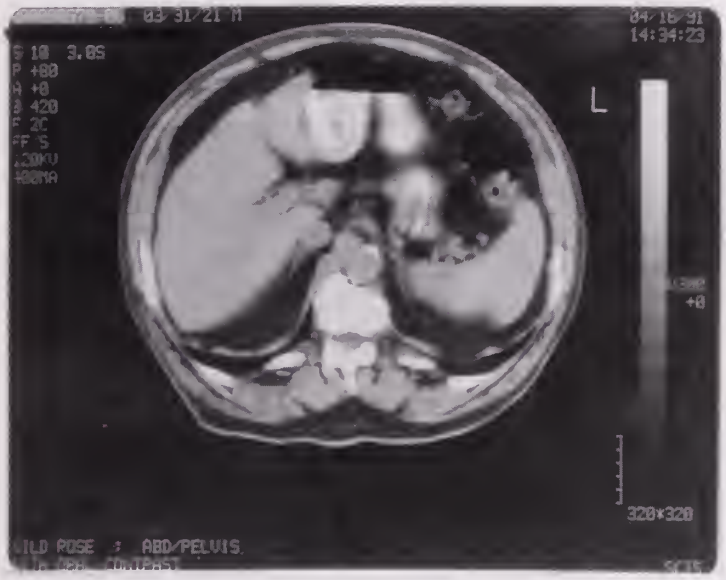

Fig 1. Preoperative computed axial tomography study of 4-16-91 demonstrating no enlargement of the pancreas. All CAT scans are at same level for compasion purposes and may not show the pancreas in its entirety.

Introduction

Acute pancreatitis occurring in the postoperative period is a life threatening complication with a mortality of approximately 50%. Operative procedures on the biliary tract and the stomach have a high incidence of postoperative pancreatitis. Operative procedures remote from the pancreas can be complicated by pancreatitis. The diagnosis of pancreatitis is usually made by the clinical findings in conjunction with laboratory studies and computed axial tomography. The clinical finding of pain in the midepigastrium with radiation into the back is a common presentation. Vomiting without nausea can be a symptom. Fever, leukocytosis and tachycardia can be present. Elevation of the serum amylase is associated with pancreatitis as well as cholecystitis and other gastrointestinal diseases. The use of two hour and 24 hour urinary amylase and serum lipase determinations have been supportive of the diagnosis. The application of computed axial tomography in the diagnosis of enlargement of the pancreas and possible pseudocyst formation is indicated when a combination of the various clinical findings is found in association with abnormal laboratory determinations.

Case Report

A 69-year-old white patient underwent a radical prostatectomy for stage B-l carcinoma of the prostate gland. Preoperative clinical staging with a bone scan and computed axial tomography of the abdomen and the pelvis was normal. (Fig. 1) Postoperatively persistent pelvic drainage was present. A CAT scan was obtained because of a suspected pelvic lymphocele. The study demonstrated the patient to have marked enlargement of the pancreas. (Fig. 2a., 2b.) Serial serum and two hour urinary amylase were obtained as well as serum lipase determinations in the postoperative period. No elevation of the lipase or the amylase values was found. The patient remained afebrile, had no pain, or any other

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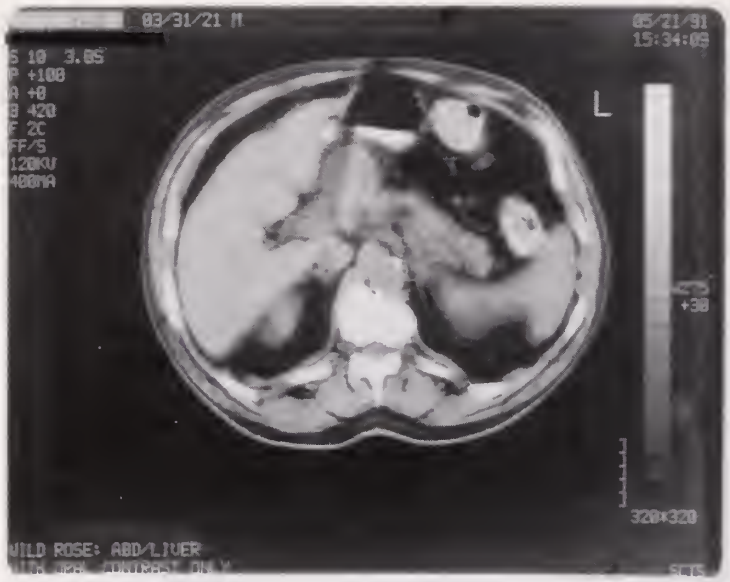

Fig 2a. Computed axial tomography study of 5-21-91 demonstrating radiological findings of pancreatitis with early pseudocyst formation.

Fig 2b. Magnification study of the pancreas showing the findings of acute pancreatitis.

Continued from previous page

symptoms of pancreatitis during his hospitalization. The patient had no past history of trauma, alcoholism or gall bladder disease. CAT scan evaluation was accomplished at three, six and 17 months postoperatively (Fig. 3a., 3b.) There was complete resolution of the enlargement of the pancreas. With the preoperative CAT scan being normal this pancreatic enlargement was most likely inflammatory and not neoplastic in nature. This represented a case of pancreatitis which could only be diagnosed with computed axial tomography in a patient with no clinical symptoms or enzyme elevations.

Discussion

Acute pancreatitis can occur with normal serum and urinary amylase determinations. Evans[1] reported a case of acute pancreatitis confirmed by operative exploration of the pancreas and a normal serum amylase in a patient with known alcohol abuse. A normal serum amylase was present in 32% of 68 cases of acute alcoholic pancreatitis reported by Spechler.[2] A possible pancreatic isoamylase deficiency as a cause of pancreatitis has been suggested by Borgstrom in patients presenting with a normal serum amylase.[3] Their patient had an association of alcohol abuse, abdominal pain and a history of ulcer disease. The diagnosis was confirmed by surgical exploration and elevated immunoreactive cationic trypsin levels.[4]

The fact that acute pancreatitis can be painless and not associated with elevated amylase determinations was reported by Lankisch in a study of postmortem investigations on forty three patients.[5]

Alcoholism and biliary disease were found to be significant contributing factors. They emphasized the high mortality rate associated with pancreatitis. The utilization of abdominal ultrasound, computed abdominal axial tomography studies and urinary amylase were recommended. Block also recommended computed axial tomography for atypical presentations of pancreatitis.[6] The importance of contrast enhanced computed axial tomography studies in establishing the diagnosis of acute pancreatitis in patients with normoamylasemia was stressed by Clavien. In his evaluation of 318 patients the diagnosis of acute pancreatitis was ascertained by computed axial tomography in 314 patients. 19% of the patients studied had normal serum amylase levels on admission. A peritoneal tap was obtained in 44 cases although the gain in diagnostic sensitivity was low when adding dialysate amylase values to serum determinations. The possibility that the inflamed pancreas was unable to produce amylase or that the amylase level had returned to normal before

admission of the patient to the hospital was suggested.[7]

With the utilization of computed axial tomography to diagnose acute pancreatitis in patients with normal amylaseamia the problem of possible exacerbations of chronic pancreatitis in alcoholic patients with related disease must be addressed. Neoptolemos emphasized that clinical judgment and computed axial tomography scanning are not always sufficient to exclude chronic pancreatitis. It may not be possible to differentiate between acute and chronic pancreatitis on computed axial tomography.[8] It is necessary to have an improved classification of acute pancreatitis since the advances in diagnostic computed axial tomography are allowing for the diagnosis of the disease in earlier stages when size of the pancreas is utilized as one of the criteria for diagnosis. In 83 patients with acute pancreatitis studied by Lankisch, the computed axial tomography abnormalities of the pancreas were still present in 23% of their patients after three months. At the time of discharge from the hospital 81% of their patients had abnormal computed axial tomography findings of the pancreas.[9] London also found that abnormal serial computed axial tomography studies persisted for up to six weeks in 51% of their patient population of 102 cases of acute pancreatitis.[10] In a study of postoperative pancreatitis in 52 patients Thompson recognized that a high index of suspicion of the disease in the postoperative period is necessary to establish the diagnosis.

This index of suspicion is necessary so that prompt management can be undertaken with an anticipated reduction in the mortality and morbidity.[11] The routine use of a modified Ranson's prognostic score with omission of LDH levels will aid in assessing the severity of the disease and allow for determination of the prognosis for the

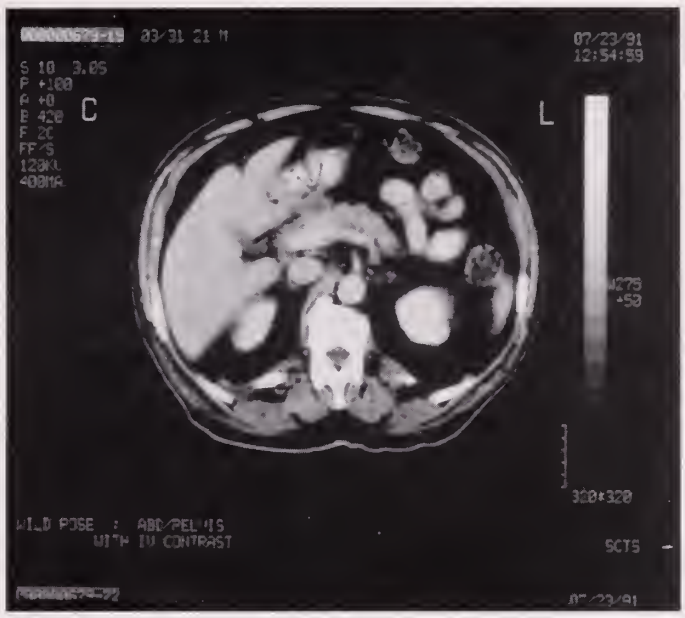

Fig 3a. Computed axial tomography study of 7-23-91 demonstrating persistent radiological findings of pancreatitis with significant improvement.

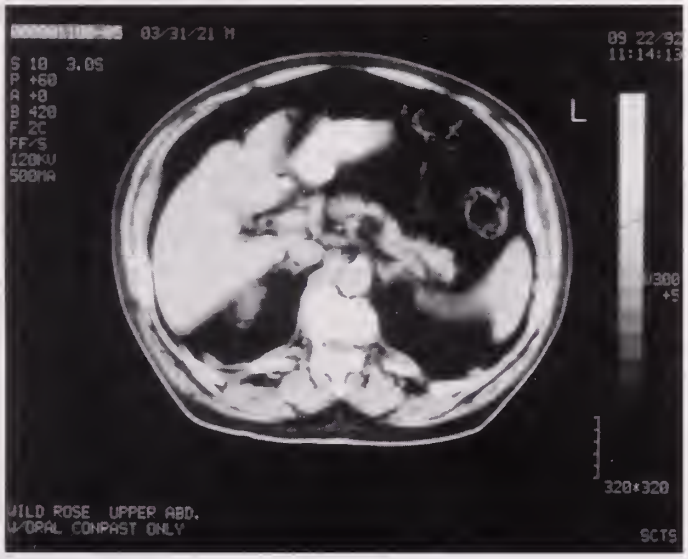

Fig 3b. Computed axial tomography study of 9-22-92 showing complete resolution of the inflammatory changes in the pancreas.

course of the pancreatitis.[12] Acute postoperative pancreatitis represents a spectrum of disease which includes patients with normal serum amylase and lipase. It is also a disease where a high degree of suspicion is necessary to establish the diagnosis in some cases. Computed axial tomography is important in the establishment of the diagnosis. Postoperative pancreatitis occurs usually with operative procedures on the biliary tract but can occur with any operative procedure. Pancreatitis can be diagnosed by computed axial tomography with no clinical symptoms or laboratory abnormalities. Pancreatitis represents a kaleidoscope of symptoms associated with the possibility of normal enzyme studies. CAT scan pancreatitis probably represents the a relatively benign form of the disease. It would seem

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prudent to recommend rest and abstinence from alcohol consumption to the patient with this diagnosis.

With increased use of CAT scans for a variety of problems in the postoperative period it is anticipated that more "asymptomatic" atypical pancreatitis with normal laboratory studies will be encountered. The terminology pancreaticomegaly may be more appropriate for some stages of pancreatic enlargement discovered incidentally on computed axial tomography. The possibility of exacerbation of chronic pancreatitis should be considered. The medical community should be aware of the spectrum of computed axial tomography diagnosed pancreatic disease. Treatment for some cases of CAT scan diagnosed pancreatitis may not be necessary. This may represent a disease process with no complications, and with no significant dangerous sequel. The prognosis for this variant of the disease appears to be excellent. In our asymptomatic patient it was not necessary to institute any therapy with documented improving pancreatic CAT scans.

References

1. Evans DB, Robinson AW and Pettit RJ: Acute pancreatitis with normal amylase. *Digestive Disease and Science* 1986;31:779-780.
2. Spechler SJ, Dalton JW, Robbins AH, Gerzof SG, Stem JS, Johnson WC, Nabseth DC, and Schimmel EM: Prevalence of normal serum amylase levels in patients with acute alcoholic pancreatitis. *Digestive Disease and Science* 1083;28:865-869.
3. Borgstrom A and Bohe M: Severe acute pancreatitis and normal serum amylase activity due to pancreatic isoamylase deficiency. *Digestive Disease and Science* 1989; 34:644-646.
4. Borgstrom A and Ohisson K: Radioimmunologicaldetermination and characterisation of cathodal trypsin-like immunoreactivity in normal human plasma. *Scand J Clin Lab Invest* 1976; 36:809-814.
5. Lankisch PG, Schirren CA and Kunze E: Undetected fatal acute pancreatitis: Why is the disease so frequently overlooked? *Am J of Gastroenterology* 1991; 86:322-326.
6. Block S, Maier W, and Clausen C, et al: Diagnostik der nekrotisierenden Pankreatitis. Vergleich von Kontrastmittel-CT und Ultraschall in einer klinischen Studie. *Dtsch Med Wochensch* 1985; 110:826-832.
7. Clavien P, Robert J, Meyer P, Borst F, Hauser H, Herrmann F, Dunand V, and Rohner A: Acute pancreatitis and normoamylasemia. *Ann of Surg* 1989;210:614-620.
8. Neoptolemos JP and London NJM: Acute pancreatitis and normoamylasemia. [letter; comment] *Ann. Surg* 1990; 212:648-649.
9. Lankisch PG, Haseloff M and Becher R: No parallel between the biochemical course of acute pancreatitis and morphologic findings. *Pancreas* 1994; 9:240-243.
10. London NJM,Neoptolemos JP, Lavelle J,Baileyl,and James D: Serial computed tomography scanning in acute pancreatitis: a prospective study. *Gut* 1989; 30:397-403
11. Thompson JS, Bragg LE, Hodgson PE and Rikkes LF: Postoperative pancreatitis. *Surg Gynecol end Obstet* 1988; 167:377-380.
12. Ranson JHC, and Pasternack BS: Statistical method for quantifying the severity of clinical acute pancreatitis. *J Surg Res* 1977; 22:79-91.❖

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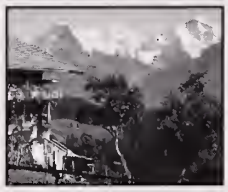

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Trends in Cervical Cancer Mortality, Wisconsin and the US, 1982-1994

Rebecca A. Knight, MD, Madison

Introduction

In 1940, cervical cancer was the leading cause of cancer death in women in the US[1]. The introduction of the Pap smear in the late 1940s revolutionized the early detection and prevention of cervical cancer. Following the introduction of the Pap smear, the incidence and mortality of cervical cancer showed a larger decrease than any other major cancer over the years from 1950 to 1989[1].

In the last twenty years, identification of multiple risk factors has enabled us to explore further possibilities of reducing the burden from cervical cancer, through primary prevention. The purpose of this paper is to explore the recent trends in cervical cancer mortality comparing, US and Wisconsin age and race subgroups. A review of these mortality trends may identify remaining high risk groups that require a new approach to primary or secondary prevention.

Methods

Data on cervical cancer deaths among US and Wisconsin white and black women of all ages were obtained from the Centers for Disease Control and Prevention (CDC). The data was downloaded from the CDC's library using the software program called WONDER. All rate calculations were adjusted to the 1990 US female population.

To assess the change over the past decade, a three year average mortality rate was calculated for 1982-1984 and compared to that of 1992-1994. A three year average was used to minimize variability. To compare trends in cervical cancer mortality, the percentage change was calculated ((T2-T1)/T1).

Results

The age-adjusted cervical cancer mortality rate declined slightly in the US over the past decade, from 4.0 deaths per 100,000 in 1982-84, to 3.4 deaths per 100,000 in 1992-94. The cervical cancer mortality declined only slightly in Wisconsin during the past decade, from 3.0 to 2.9 deaths per 100,000 (Table).

The trends in cervical cancer mortality are different for younger and older women. The greatest decline was in the older age groups, with a decline of 17% among women 45-64 years of age, and a 19% decline among women 65 years of age and older in the US (Table). The trends in Wisconsin were similar, with declines of 12% and 11% respectively. In contrast to the declining mortality among women 45 years of age and older, cervical cancer mortality increased 8% among women 25-45 years of age in the US, and 33% among women in Wisconsin (Table).

Examining the trends related to race, the average mortality rate decreased from 1982-1984 to 1992-1994 in both white and black women. In the US, the average annual mortality rate decreased by 15% in white women. The overall rate remained higher in black women but made an even larger percent decline of 21%. In Wisconsin, the mortality rate for white women and black women also declined.

Discussion

Consistent with known trends, the rate of cervical cancer mortality continued to decline from 1982 through 1994 in the US. Surprisingly, this was not true for younger women. This is contrary to what one might expect, given the wide availability of the Pap smear and increasing health consciousness among women. A literature review showed that younger women were more likely to get regular Pap smears[2].

It may be that the increasing mortality rates among young women result from an increase in the incidence of cervical cancer. Younger women may have a higher carrier rate of human papilloma virus (HPV). Schiffman reports that 76% of cervical cancer is attributable to HPV[3]. A cross-sectional study of college students found a 46% prevalence of HPV[4]. Population-based studies state that increased mortality rates correspond only to increased incidence[5].

The impact of the AIDS epidemic on young women's incidence of cervical cancer is not clearly defined in the literature, but cervical cancer is now an AIDS-defining illness. Human immunodeficiency virus (HIV) may facilitate the speed at which cervical dysplasia can overcome the immune system and become cancerous. Few studies have looked at the incidence of HIV infection in cervical cancer in different age groups.

The decrease in cervical cancer mortality among older women may be a result of increased detection and treatment of early disease.

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Table. Trends in Cervical Cancer Mortality 1982-1984 to 1992-1994, United States and Wisconsin.

	United States				Wisconsin			
	1982-84		1992-94		1982-84		1992-94	
	Annual		Annual		Annual		Annual	
Age	Number	(rate)	Number	(rate)	Number	(rate)	Number	(rate)
25-44	861	(2.4)	1,080	(2.6)	12	(1.8)	19	(2.4)
45-64	1,795	(7.7)	1,949	(6.4)	27	(6.0)	26	(5.3)
65+	1,937	(11.8)	1,861	(9.6)	30	(8.5)	30	(7.6)
Race								
White*	3,494	(3.4)	3,459	(2.9)	64	(2.9)	76	(2.6)
Black*	1,034	(9.4)	1,011	(7.4)	5	(10.2)	5	(5.7)
All Ages*	4,615	(4.0)	4,609	(3.4)	69	(3.0)	76	(2.9)

*Age adjusted to the 1990 U.S. female population. Includes persons under age 25.

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Medicare coverage was extended to included triennial Pap testing beginning in July 1990[6]. Older women may have a better chance of being screened early in the disease due to more frequent visits to the health care system. However, nationally, older black women are excluded in this overall trend. One study of poor urban African-American women showed that they were receiving substandard screening despite averaging 3.6 to 5 visits per year to the study clinics[7].

Although cervical cancer mortality rates are declining for both black and white women, blacks continue to have higher rates. Black women have twice the incidence rate of cervical cancer as white women[1,8]. However, studies are sparse exploring the incidence or pre-cancerous disease by race. This may reflect less surveillance among blacks or fewer studies including black populations.

Data from the National Cancer Institute from 1983-1987, revealed blacks had lower five-year cervical cancer survival rates for most stages of disease[9]. One question commonly raised with respect to racial differences is the effect of socioeconomic status on health outcomes. Studies by Devesa[10] and Schairer[11] showed that the excess risk of cervical cancer observed in blacks is largely related to socioeconomic class. In contrast, Samelson's study showed significantly higher rates among blacks which remained even after stratifying for income level. In fact, being below the poverty level was the great equalizer. The differences were more pronounced above the poverty level[12].

Conclusion

Every cervical cancer death should be considered as a failure of prevention. Despite this fact, certain groups of women are not benefiting from current prevention technology. Studies are needed to determine the cause of the increased mortality trends in younger women and black women. Public awareness of modifiable risk factors should be promulgated. Barriers to screening already identified include access to care, poverty, embarrassment, fear of pelvic examination, fear of cancer, or lack of knowledge about screening[13,14]. To eliminate cervical cancer as a cause of death, routine universal Papanicolaou screening should be available and encouraged for all women.

References

1. Brownson RC, Remington RL, and Davis JR. *In* Chronic Disease Epidemiology and Control. 1993;pp.153-156.
2. Remington P, Lantz P, Phillips JL. Cervical cancer deaths among older women: Implications for prevention. *Wis Med J*. 1990;89(1):30-34.
3. Schiffman MH, Bauer HM, Hoover RN, et al. Epidemiologic Evidence Showing That Human Papilloma virus Infection Causes Most Cervical Intraepithelial Neoplasia. *J Natl Cancer Inst*. 1993;85:958-964.
4. Bauer HM, Ting Y, Greer CE, et al. Genital human papilloma virus infection in female university students as determined by a PCR-based method. *JAMA*. 1991;265: 472-477.
5. Crowther ME. Is the Nature of Cervical Carcinoma Changing in Young Women? *Obstet Gynecol Survey*. 1994;50(1):71-82.
6. Mandelblatt J, Schechter C, Fahs M, and Muller C. Clinical implications of screening for cervical cancer under Medicare. *Am J Obstet Gynecol*. 1991;164:644-651.
7. Whitman SW, Ansell D, Lacey L, et al. Patterns of Breast and Cervical Cancer Screening at Three Public Health Centers in an Inner-City Urban Area. *Am J Public Health*. 1991;81:1651-1653.
8. Eddy DM. Screening for cervical cancer. *Ann Intern Med*. 1990; 113:214-226.
9. Boring CC, Squires TS, Tong T, et al. Cancer statistics, 1994. *CA Cancer J Clin*. 1994;44:7-26.
10. Devesa SS, Diamon EL. Association of breast cancer and cervical cancer incidences with income and education among whites and blacks. *JNCI*. 1980;65:515-528.
11. Schairer C. Brinton LA, Devesa SS, et al. Racial differences in the risk of invasive squamous-cell cervical cancer. *Cancer Causes Control*. 1991;2:283-289.
12. Samelson EJ, Speers MA, Ferguson RJ, and Bennett C. Racial Differences in Cervical Cancer Mortality in Chicago. *Am J Public Health*. 1994;84:1007-1009.
13. Lucey CR. Screening for gynecologic malignancies. *In* Contemporary Management in Internal Medicine, 1991, pp 105-127.
14. Sawyer JA, Earp J, Fletcher RH, et al. Pap tests of Rural Black Women. *J Gen Intern Med*. 1990;5:115-119. ❖

Stomach Cancer Mortality Continues to Decline, Wisconsin and the US, 1982-1994

Barbara Wich, MD and Patrick Remington, MD, MPH, Madison

Introduction

Despite a precipitous and unexplained decrease in incidence over the past sixty years in the US, stomach cancer is the second most common cause of cancer mortality internationally[3]. As recently as 1930 in the US, stomach cancer was the number one cause of cancer death by a factor of two in men and the third leading cause in women[1]. Since 1930 in the US, the incidence and mortality of stomach cancer has inexplicably declined by 70% in men and 80% in women[6]. By 1995, stomach cancer had decreased to 14th in US cancer incidence[8] and 8th as cause of cancer mortality[1]. Historically men develop gastric cancer at twice the rate of women, and non-whites at twice the rate of Caucasians[1,3].

The purpose of this paper is to explore the recent trends in stomach cancer mortality in the U S and Wisconsin over the decade from 1982 to 1994.

Methods

Data on stomach cancer mortality (ICD N 151.0 - N 151.9) in US and Wisconsin from 1982 to 1994 were obtained from the Centers for Disease Control and Prevention (CDC). The data were accessed via the software program called WONDER, an online electronic link to the CDC's library.

All rates were age-adjusted to the 1990 United States population. To provide a more stable estimate of the rate and trend of stomach cancer mortality and to minimize random annual fluctuations, the rates were obtained and averaged for three years a decade apart. To compare trends in gastric cancer mortality over the decade, the percentage change in rate was calculated for each subgroup and overall.

Results

The age-adjusted death rate from stomach cancer declined 18% during the past decade in the U.S., from 6.5 deaths per 100,000 in 1982-84 to 5.3 deaths per 100,000 in 1992-94 (Table). The stomach cancer mortality rate in Wisconsin parallels the consistent decline seen in the US (Figure). These trends were seen in all age-, gender, and race-subgroups.

Age: The stomach cancer mortality rate declined consistently in all age groups, ranging from a 14% decline among persons 85 years of age and older to a 26% decline among persons 65-74. The increasing risk of stomach cancer with age continues to be observed.

Gender: Over the past decade the U.S. mortality has decreased by 18% in males and 22% in females, while in Wisconsin the rates declined 28% and 24% respectively. Males continue to have about twice the risk of stomach cancer compared with females.

Race: Stomach cancer mortality declined more in whites (22%) compared with blacks (13%). This trend was also seen in Wisconsin, where the age-adjusted rate declined 33% among whites but

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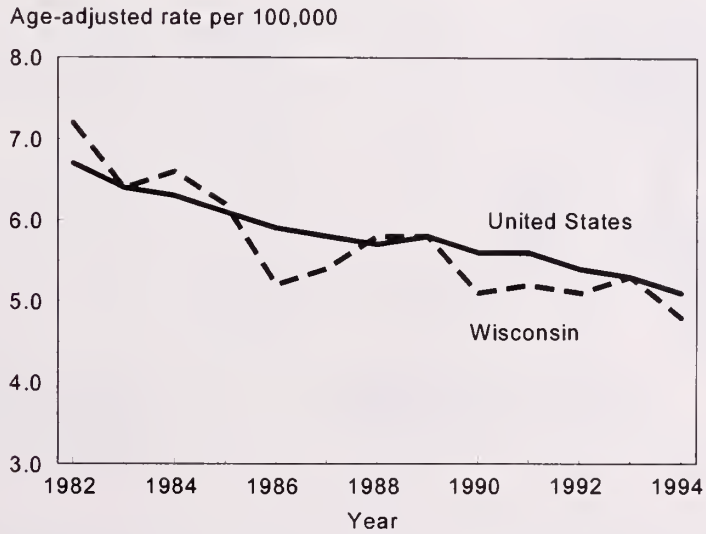

Figure: Trends in age-adjusted stomach cancer mortality, United States and Wisconsin, 1982-1994.

Dr Wich is a Women's Health Fellow at the William S. Middleton Veterans Memorial Hospital and Department of Medicine, University of Wisconsin, Madison. This study was conducted as a project in a Chronic Disease Epidemiology class in the Department of Preventive Medicine. Dr Remington is the State Epidemiologist for Chronic Disease, Wisconsin Division of Health, Madison, WI. Address reprint requests to Dr. Patrick Remington, Wisconsin Division of Health, 1414 East Washington Ave, Madison, WI, 53703.

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increased 32% among blacks. This increase among blacks is based on a small number of deaths, from an average of 7 per year in 1982-84 to an average of 12 per year in 1992-94.

During this period, blacks continue to have about twice the risk of death from stomach cancer compared with whites.

Comment

Stomach cancer mortality rates declined steadily in the US and Wisconsin over the past decade, continuing a consistent decline that started over 50 years ago[8]. The male rate continues at twice the female rate, and the black mortality rate remains double that of the white. However, the decline is seen in all age-, gender-, and race-groups.

The decline in stomach cancer mortality is the most dramatic decline of any cancer since 1930. Without major US advances in early diagnosis or treatment during the past sixty years[5], the mortality rate of gastric carcinoma plummeted from the leading cause of US cancer mortality in the 1930s to the eighth most common cause today[1] and continues to decline for unknown reasons. This has been called an "unplanned triumph"[7]. Gastric carcinoma continues to account for 2.3% of all new US cancer cases with approximately 23,000 new diagnoses and 15,000 deaths per year in the early 1990s[5].

Gastric carcinoma exhibits wide geographic variability[1,3,6,8]. Ecological studies suggest a multifactorial etiology. Exposure to one or more environmental factors early in life seems to predispose an individual to develop adenocarcinoma of the stomach many decades later[2,6,7]. Poverty is one risk factor[3,6]. Correa believes the combination of *H. pylori* infection in the stomach combined with excessive salt intake and a diet low in fresh fruits and vegetables is responsible for 60% of these cancers[2]. At this time, however, the etiology is unknown.

These data also demonstrate that stomach cancer mortality rates are higher among blacks, and that the rate is not declining as much compared with whites. The reasons for these differences are not known , but have been noted previously. They may reflect lower socioeconomic status of the black population, especially the black population born at the turn of the century and into the 1930s who are now at the highest incidence ages for gastric carcinoma. Poverty is an independent risk factor and also influences access to health care. The rate trends may reflect different racial dietary preferences with consumption of more salted and preserved foods coupled with less use of fresh produce in the black population. Finally, there may be genetic factors which predispose or protect specific groups.

Analyses based on mortality data are limited for a number of reasons. Because the CDC mortality data are obtained from death certificates, the histological type of stomach cancer is often not known or recorded. Also, the ICD code for stomach cancer does not differentiate histological type. Ninety-percent (90%) of stomach cancers are adenocarcinoma, 1-3% leiomyosarcoma, and the remaining 6-8% non-Hodgkin's lymphoma.

Table. Trends in Stomach Cancer Mortality, 1982-1984 to 1992-1994, United States and Wisconsin.

	United States			Wisconsin		
Age	1982-84 Rate	1992-94 Rate	Percent+ Change	1982-84 Rate	1992-94 Rate	Percent+ Change
45-54	4.7	3.5	-25%	3.4	2.9	-15%
55-64	12.1	9.9	-18%	11.2	7.8	-30%
65-74	26.1	20.9	-26%	28.3	21.0	-26%
75-84	46.9	37.5	-20%	51.5	38.7	-25%
85+	70.9	61.1	-14%	88.9	66.7	-25%
Gender						
Men*	9.3	7.6	-18%	9.8	7.1	-28%
Women*	4.5	3.5	-22%	4.6	3.5	-24%
Race						
White*	5.9	4.6	-22%	6.6	4.8	-33%
Black*	11.2	9.7	-13%	8.2	10.8	+32%
All Ages*	6.5	5.3	-18%	6.7	5.1	-24%
Annual No.	14,229	13,683	--	324	276	--

*Age adjusted to the 1990 US population. Includes persons under age 25.
+Percent change in rate.

Adenocarcinoma is further divided into two types: 1) a diffuse type which occurs more gender neutrally in younger individuals, and invades the mucosa diffusely with concomitant earlier metastatic disease. Incidence of diffuse gastric carcinoma seems to be static or increasing, and 2) an intestinal or epidemic type which "tends to predominate in the geographic areas with the highest incidence rates of gastric cancer"[3]. This form of adenocarcinoma has a 2:1 male to female ratio and is more prevalent in older age groups[3,6,8]. These two histologic categories of adenocarcinoma seem to be etiologically and epidemiologically distinct[3]. The ICD 151 mortality statistics seem to most closely reflect the epidemic type of adenocarcinoma.

Conclusions

Stomach cancer mortality continues to decline in Wisconsin and in the US, largely for unknown reasons. The lack of similar progress among blacks lessens the "unplanned triumph" in stomach cancer trends and merits scrutiny in the future.

References

1. *Cancer Statistics Review 1973-1989.* National Institutes of Health - National Cancer Institute, Bethesda Maryland, NIH Publication No. 92-2789.
2. Correa P: Is gastric carcinoma an infectious disease? *N Eng J Med* 1991; 325(16):1170-1171.
3. Fuchs CS & Mayer RJ: Gastric carcinoma. *New Eng J Med* 1995; 333(1):32-41.
5. Lawrence W: Gastric neoplasms. In Holleb AI, Fink DJ, Murphy GP (eds.): *American Cancer Society Textbook of Clinical Oncology,* The American Cancer Society, Inc., Atlanta, GA, 1991, pp. 245-253.
6. Mayer, RJ: Gastrointestinal Cancer. In Dale DC & Federman DD (eds.): Scientific American Medicine. Scientific American, Inc., NY. 3/1996; 12 Oncology, VIII: pp. 1-4.
7. Melato M, Sasso F: Is the incidence of gastric cancer still in decline? AJG 1996;91(4):824-825.
8. Neugut AI, Hayek M, Howe G: Epidemiology of gastric cancer. *Seminars in Oncology 1996;* 23(3):281-291.❖

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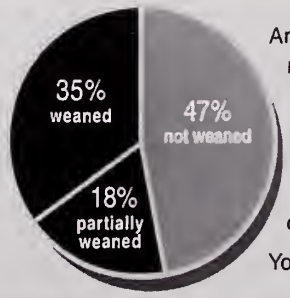

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A Case Report

Retinoic Acid Syndrome in Acute Promyelocytic Leukemia

Daniel Sentero, MD, and Janet Hosenpud, MD, Brookfield

Abstract

All-trans retinoic acid (ATRA) has been used successfully in inducing remission in patients with acute promyelocytic leukemia (APL). Its overall toxicity is considerably less compared to standard induction chemotherapy; however, it is associated with a high incidence of a potentially fatal symptom complex referred to as "retinoic acid syndrome."

This report describes a patient with APL who developed the syndrome a few weeks after initiating induction therapy with ATRA despite being treated for hyperleukocytosis. The case illustrates the classic features of the syndrome and its dramatic response to corticosteroid treatment.

Introduction

All-trans retinoic acid (ATRA) has recently been used in the treatment of acute promyelocytic leukemia (APL), a distinct clinical and pathologic subtype of acute myeloid leukemia that is characterized by reciprocal translocations between the long arms of chromosomes 15 and 17, the presence of disseminated intravascular coagulation either at diagnosis or with the initiation of cytotoxic treatment, and by a high incidence of early fatal hemorrhage.[1-5] The translocation involves a breakpoint in the region of the retinoic acid receptor-alpha which has been shown to be involved with growth and differentiation of myeloid cells in vitro.[6-9] Unlike conventional chemotherapy which induces cytolysis and bone marrow hypoplasia, the biologic effect of ATRA on APL involves differentiation of the malignant cells into phenotypically mature cells before their eventual elimination.[9,10] This results in prompt resolution of the characteristic coagulopathy and eventual repopulation of the bone marrow with normal hematopoietic elements.[9-11]

Common side effects of ATRA include dryness of skin and mucosae, headache, hypertransaminemia, hypertriglyceridemia and bone pain.[12] Approximately 25% to 40% of APL patients receiving ATRA develop a distinct clinical syndrome characterized by fever, dyspnea, weight gain, pulmonary infiltrates, pleural or pericardial effusion, episodic hypotension and occasionally, renal impairment.[11,13] This symptom complex, referred to as "retinoic acid syndrome," usually occurs from two to 21 days after starting treatment and has been frequently, but not invariably, associated with hyperleukocytosis.[11,12] It carries a high mortality rate without appropriate treatment and has been shown to have an excellent response to dexamethasone therapy.[11]

The following report describes a patient treated with ATRA for newly-diagnosed APL who developed clinical evidence of retinoic acid syndrome on day 22 of therapy. This report highlights the common manifestations of the syndrome, its occurrence despite treatment of leukocytosis, and its rapid reversal with prompt dexamethasone treatment.

Case report

A 47-year-old man was hospitalized on March 17, 1996, with generalized malaise, echymoses of the thighs and petechiae of the oral mucosa. Hemoglobin (Hb) was 8.4 g/dl, white blood count (WBC) was 2,100/mm^3 and platelets were 10,000/mm^3. Coagulation studies included prothrombin time (PT) 13.6 s (normal: 11-13 s), partial thromboplastin time (PTT) 30.6 s (mornal: 25-35 s), fibrinogen 2.49 g/1 (normal: 1.73-3.57 g/1), fibrin degradation products (FDP) 10-40 (normal: <10), and d-dimer >4 (normal: <1). Bone marrow aspirate and biopsy confirmed the diagnosis of APL, microgranular variant (M3V) and chromosomal studies demonstrated the typical translocation, t (15;17), seen in APL. He was then transferred to this institution on March 21, 1996, and was started on ATRA at 45 mg/m^2/day on the following day. His WBC was monitored daily and was 3,000/mm^3 on day one of

Continued on next page

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therapy, 3,400/mm^3 on day five, 17,900/mm^3 on day 10, and 21,200/mm^3 on day 12 was his peak WBC. He was started on hydroxyurea for his hyperleukocytosis on day 12, initially at 2.0 g/day and later increased to 4.0 g/day. His WBC decreased to 10,700/mm^3 on day 16 and he was discharged on ATRA, hydroxyurea, and vancomycin for line infection.

On April 10, 1996 (day 20 of ATRA therapy), he was readmitted for fever, chills and dyspnea and was treated with ceftazidime and tobramycin, along with vancomycin. His chest x-ray showed no lung infiltrate and culture studies were all negative. His WBC was 6,000/mm^3 and serum creatinine was 1.7 mg/dl (baseline: 0.7 mg/dl). His urine sediment was positive for muddy brown cast and tobramycin was discontinued for presumed acute tubular necrosis.

On April 12, 1996 (day 22), he complained of substernal chest pain and increasing shortness of breath. He was tachypneic, tachycardic and febrile with temperature at 103° F. He had bibasilar crackles on lung exam and pitting edema of the lower extremities. His weight had increased by 3.5 kg over the previous 24 hours. His electrocardiogram showed sinus tachycardia and arterial blood gas showed a pO_2 of 73 mm Hg (normal: 80-104 mm Hg on room air) and an O_2 saturation of 94% (normal: 95-98% on room air) on 6 1 of O_2 via nasal cannula. His lung ventilation and perfusion scan were interpreted as low probability for pulmonary embolism and doppler ultrasound of his lower extremities showed no evidence of deep venous thrombosis.

ATRA therapy was discontinued on that day and he was started on dexamethasone at 10 mg IV every 12 hours for possible retinoic acid syndrome. The following day, he was more dyspneic and had a temperature of 104.4° F and a blood pressure of 82/62. He had diffuse coarse crackles on lung exam and a loud pericardial friction rub on heart exam. He was then transferred to the ICU on 100% O_2 via face mask. His chest x-ray showed severe bilateral perihilar pulmonary edema. His echocardiogram showed mild generalized hypokinesis but no evidence of pericardial effusion. A repeat echocardiogram was done two days later and revealed the same findings. He was treated with furosemide, dexamethasone, and imipenem for possible superimposed pneumonia.

Despite worsening of his alveolar edema on chest x-ray, he did not require intubation and mechanical ventilation. His fever and pericardial friction rub resolved within his first two days in the ICU and chest x-ray on his fifth ICU day showed significant improvement of alveolar edema. His serum creatinine peaked at 3.8 mg/dl on his first ICU day and improved thereafter. He was transferred to the floor on 2 1 of O_2 via nasal cannula on his fifth ICU day and was maintained on tapered doses of dexamethasone which he received for a total of 10 days. Bone marrow biopsy done on April 18, 1996 (day 28) showed persistent APL with cells consisting predominantly of promyelocytes and myelocytes, and he was started on induction chemotherapy two days later with idarubicin 12 mg/m^2/day on days one, two and three and cytarabine 100 mg/m^2/day for seven days.

Discussion

Retinoic acid syndrome (RAS) was first described by Frankel et al in 1991 in a patient with APL receiving ATRA.[13] Its incidence has been reported to be as high as 40%.[14] The etiology of this syndrome remains speculative. Some of the proposed mechanisms by which ATRA can produce this syndrome in APL patients include the following:

- release of vasoactive cytokines, including cathepsin G, by differentiating leukemic cells resulting in a symptom complex resembling "capillary leak" syndrome associated with interleukin-2;
- increased chemotaxis and motility of maturing leukemic cells resulting in their migration to tissues such as lung and kidney;
- increased expression of integrin (leukocyte adhesion receptors) on leukemic cell surface which may enhance the cells' adherence to capillary endothelium and promote focal endothelial leakage.[11,15,16,17]

Although post-mortem studies on patients with RAS showed prominent organ infiltration by leukemic cells, no histologic evidence of intraluminal capillary leukostasis suggesting impaired cellular rheology was found in early studies.[11]

An interesting and controversial aspect of RAS is its association with leukocytosis which is usually induced by ATRA therapy.[11] European studies have noted that patients whose leukocyte counts were above 6,000/mm^3 by day five, or 10,000/mm^3 by day 10, or 15,000/mm^3 by day 15 of ATRA treatment were at risk for leukostasis and should probably receive emergent chemotherapy along with ATRA.[12]

This practice of treating leukocytosis based on leukocyte criteria to prevent RAS has been questioned by several New York studies which have shown that only less than half of patients who developed leukocytosis following ATRA therapy developed the syndrome, and in one-third of the cases, the onset of serious symptoms was not associated with leukocytosis.[11]

Moreover, the initial leukocyte count at presentation and the rate of increase in leukocyte count be-

fore the onset of the syndrome were not found to be predictive of the development of the syndrome.[18] Warrell Jr. et al have shown that the predictive sensitivity and specificity of the European criteria for leukocytosis were at most, 62% and 69%, respectively, with positive predictive value ranging from 44% to 72%.[18]
Hence, the New York group has been skeptical about treating leukocytosis based on the European criteria as previous studies have shown dismal results with aggressive treatment of leukocytosis, specifically with leukapharesis and low-dose chemotherapy, both of which have resulted in high mortality rates secondary to hemorrhage.[11] Hwang et al, on the other hand, have recommended the addition of hydroxyurea to ATRA therapy in the setting of leukocytosis, following their successful treatment with combined hydroxyurea and leukapharesis of a patient with hyperleukocytosis and RAS.[19]

Our patient did satisfy the European criteria for leukocytosis with WBC exceeding 10,000/mm^3 and 20,000/mm^3 on days 10 and 12, respectively. His leukocytosis responded promptly to hydroxyurea with counts dropping to less than 10,000/mm^3 within three days of treatment. However, despite correction of his leukocytosis, signs and symptoms of RAS developed within 10 days of his peak leukocyte count. His WBC just prior to the onset of definite signs of RAS ranged from 6,000/mm^3 to 11,200/mm^3 which suggests that factors other than leukocytosis may be involved in the development of the syndrome.

Our patient presented with two interesting features during the onset of his RAS. One was acute renal failure which, in this patient, may be multifactorial, including possible renal leukostasis resulting from ATRA therapy. Acute renal failure has been previously reported in a patient with APL during ATRA therapy and was associated with transient renal enlargement during a period of leukocytosis and with beneficial response to dexamethasone suggesting its relationship to RAS.[20] Second was his pericardial friction rub following the onset of his chest pain. Although his echocardiogram failed to show any evidence of pericardial effusion and no other tests were done to confirm the presence of pericarditis, prompt response of his friction rub to dexamethasone therapy suggests that pericarditis, probably secondary to pericardial leukostasis, can occur in RAS.

Patients who develop RAS have been shown to respond dramatically to high doses of dexamethasone, especially when administred immediately after the appearance of dyspnea.[11] The practice of administering corticosteroids at the first sign of suggestive symptoms of RAS has resulted in practically zero fatality in recent years.[14] Studies comparing lower doses of ATRA (i.e., 25 mg/m^2/day) with conventional dose (45 mg/m^2/day) in patients with APL have shown no significant difference in incidence of hyperleukocytosis and RAS between the two groups.[21]

ATRA is a major breakthrough in the management of APL and more studies are underway to compare its efficacy with conventional chemotherapy. Retinoic acid syndrome still remains an important cause of morbidity from this treatment. This report has illustrated the classic features of the syndrome and highlighted the importance of having a high index of suspicion, coupled with early intervention with corticosteroids, in the management of this syndrome. The optimal approach to leukocytosis during ATRA therapy still remains to be clarified.

References

1. Golomb HM, Rowley JD, Vardiman JR, Baron J, Locker G, Krasnow S. Partial deletion of long arm of chromosome 17: a specific abnormality in acute promyelocytic leukemia? *Arch Intern Med* 1976;136:825-828.
2. Larson RA, Kondo K, Vardiman JW, Butler AE, Golomb HM, Rowley JD. Evidence for a 15;17 translocation in every patient with acute promyelocytic leukemia. *Am J Med* 1984;76:827-841.
3. Stone RM, Mayer RJ. The unique aspects of acute promyelocytic leukemia. *J Clin Oncol* 1990;8:1913-1921.
4. Ventura GJ, Hester JP, Dixon DO, Khorana S, Keating MJ. Analysis for risk factors for fatal hemorrhage during induction therapy of patients with acute promyelocytic leukemia. *Hematol Pathol* 1989;3:23-28.
5. Frankel SR, et al. All-trans retinoic acid for acute promyelocytic leukemia. Results of the New York study. *Ann Intern Med* 1994;120-278-286.
6. de The H, Chomienne C, Lanotte M, Degos L, Dejean A. The t(15;17) translocation of acute promyelocytic leukemia fuses the retinoic acid receptor alpha gene to a novel transcribed locus. *Nature* 1990; 347:558-561.
7. Borrow J, Goddard AD, Sheer D, Solomon E. Molecular analysis of acute promyelocytic leukemia breakpoint cluster region on chromosome 17. *Science* 1990;294:1577-1580.
8. Collins SJ, Robertson KA, Mueller L. Retinoic acid-induced granulocyte differentiation of HL-60 myeloid leukemia cells is mediated directly through the retinoic acid receptor (RAR-alpha). *Mol Cell Biol* 1990;10:2154-2163.
9. Warrell Jr RP, Frankel SR, et al. Differentiation therapy of acute promyelocytic leukemia with tretinoin (all-trans retinoic acid). *N Engl J Med* 1991;324:1385-1393.
10. Castaigne S, Chomienne C, Daniel MT, Ballerini P, Berger R, Fenaux P, et al. All-trans retinoic acid as a differentiation therapy for acute promyelocytic leukemia. I Clinical results. *Blood* 1990;76:1704-1709.
11. Lauwers G, Weiss M, Warrell Jr R.

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The "retinoic acid syndrome" in acute promyelocytic leukemia. *Ann Intern Med* 1992;117:292-296.

12. Fenaux P. The role of all-trans retinoic acid in the treatment of acute promyelocytic leukemia. *Acta Haematol* 1993;89(suppl 1):22-27.
13. Frankel SR, Weiss M, Warrell Jr RP. A retinoic acid syndrome in acute promyelocytic leukemia: reversal by corticosteroids. *Blood* 1991; 78(suppl):380a.
14. Eardley A, Heller G, Miller Jr W, Frankel S. Treatment of acute promyelocytic leukemia with all-trans retinoic acid: an update of the New York experience. *Leukemia* 1994;8:923-933.
15. Seale J, Degos L, Chomienne C, et al. All-trans retinoic acid rapidly decreases cathepsin G synthesis and mRNA expression in acute promyelocytic leukemia. *Leukemia* 1996;10-95-101.
16. Itoh Y, Ohyashiki K, Ohtaka M, et al. All-trans retinoic acid induced enrichment of functionally normal neutrophils invivo in a patient with acute promyelocytic leukemia. *Leukemia* 1992;6:806.
17. Namaki T, et al. Effect of cytokins on the proliferation and differentiation of acute promyelocytic leukemia cells: possible relationship to the development of "retinoic acid syndrome." *Anticancer Research* 1994;14-817-823.
18. Vahdat L, Maslak P, Miller Jr W, Eardley A, Heller G, Scheinberg D, Warrell Jr R. Early mortality and the retinoic acid syndrome in acute promyelocytic leukemia: impact of leukocytosis, low-dose chemotherapy, PMN/RAR-alpha isoform, and CD13 expression in patients treated with all-trans retinoic acid. *Blood* 1994;84:3843-3849.
19. Hwang W, Gau J, Chen M, Young J. Treatment of actue promyelocytic leukemia with all-trans retinoic acid: successful control of hyperleukocytosis and leukostasis syndrome with leukaphereses and hydroxyurea. *Am J Hematol* 1993; 43:323-324.
20. Flombaum C, Isaacs M, Reich L, Berman E, Warrell Jr R. Acute renal failure associated with the retinoic acid syndrome in acute promyelocytic leukemia. *Am J Kidney Dis* 1996;27:134-137.
21. Castaigne S, Chomienne C, et al. Effectiveness and pharmacokinetics of low dose all-trans retinoic acid (25 mg/m^2) in acute promyelocytic leukemia. *Blood* 1993;82:3560-3563. ❖

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Vegetables, Fruit, and Cancer Prevention: The Wisconsin 5 a Day for Better Health Initiative

Diane Moreau-Stodola, MS, RD, Green Bay

Introduction

What if somebody invented a health program that limits cancer risk without doctors, drugs, or deprivation? Well, somebody did, and it is called the "5 a Day for Better Health" project. The 5 a Day for Better Health program encourages all Americans to eat at least five servings of fruits and vegetables each day in order to reduce their risk of developing certain cancers and other chronic diseases. It is the first national program to focus on the positive role of fruits and vegetables in preventing some diseases and serves as a joint effort of the National Cancer Institute and the Produce for Better Health Foundation. In Wisconsin, the 5 a Day for Better Health project is coordinated by the Wisconsin Division of Health, Bureau of Public Health.

Community-based interventions

To heighten the awareness of the 5 a Day for Better Health project message and encourage more people to eat at least five servings of fruits and vegetables, the Bureau of Public Health started a 5 a Day for Better Health Coalition (see Table 1 for listing of Coalition members). The coalition consists of industry partners, growers, associations such as cancer, heart, and diabetes, and numerous other organizations that have an interest in promoting good nutrition and/or the increased consumption of fruits and vegetables.

The strength of the 5 a Day for Better Health message liew with the partnering done through the coalition. The coalition met to assess the current consumption of fruits and vegetables, organize committees, determine the marketing plan, and begin implementation.

The coalition agreed that the focus should be to increase the awareness of the message through logo recognition, provide information about the actual size of a serving (Table 2), promote delicious, low-cost fruits and vegetables with simple messages (Table 3), and show the ease of recipe preparation. The activities of the Coalition's plan for 1996 are detailed below:

Local health departments and women, infant and children supplemental food program (WIC)

Posters and written materials have been distributed. Some WIC projects have offered food samples of a low-fat 5 a Day recipe or have heightened the awareness of a new

Continued on next page

Table 1: 5 a Day for Better Health Coalition Members, Wisconsin, 1997.

Alsum Produce
American Cancer Society
American Diabetes Association
American Heart Association, Wisconsin Affiliate
Berry Growers Association
Cancer Information Service
Copp's Corporation
Cranberry Association
Finley Orchards
Kohl's
Medical College of Wisconsin
Milwaukee Hunger Task Force
Mt Mary College
Nash Finch
Potato Growers
Quad Graphics
Roundy's Foods
Super Valu Stores
UW Extension
Wisconsin Apple Growers
Wisconsin Bureau of Elderly Services
Wisconsin Department of Corrections
Wisconsin Department of Public Instruction
Wisconsin Dietetics Association
Wisconsin Division of Health
Wisconsin Fresh Market Vegetable Growers
Wisconsin/Minnesota Canned Vegetable Council

Ms Moreau-Stodola, MS, RD, is a public health nutrition consultant and coordinator of the Wisconsin 5 a Day Project with the Bureau of Public Health, Northeastern Regional Office, Green Bay, Wisconsin. Address reprint requests to Susan Wood, Chief, Section of Chronic Disease Prevention and Control, Wisconsin Division of Health, 1414 East Washington Ave, Rm 251, Madison, WI, 53703.

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fruit or vegetable each month by creating a display or bulletin board in a clinic waiting area. The WIC Farmers Market Project created a cookbook that was distributed to participants in the WIC project. Several local health departments have used the 5 a Day theme at their county fair exhibits.

Americorps

Americorps, often called the Peace Corps of the 1990s, is a federally-funded initiative to provide training to Milwaukee inner city youth. The Milwaukee project is one of three Americorps projects in the nation to focus on healthy eating. For the last two and a half years, a small group of young adults has taken the message of 5 a Day to over five thousand young children in the Milwaukee schools and Head Start projects. They have presented the message in a fun way by using games and skits. They have also incorporated the importance of physical activity by playing games where a piece of fruit, such as a banana or orange, may be tossed.

Mt Mary College

The management class of the dietetics program took the 5 a Day for Better Health project to the student body of the college. With the use of surveys, food demonstrations and materials, they learned that not everyone is eating five servings of fruit or vegetables per day. The most frequent reason given was lack of time for preparation.

Wisconsin State Fair

For the past two years, a 5 a Day for Better Health project exhibit has been staffed at the Wisconsin State Fair. This exhibit, located in the Agriculture Building, reaches a quarter of a million people with the message. It is staffed for the entire ten days by members of the coalition. Materials are distributed and individuals staffing the booth are knowledgeable about the project. They answer questions from participants or viewers.

Schools

The Department of Public Instruction's nutrition education and training coordinator is a member of the 5 a Day Coalition. Schools have been a big focus of the 5 a Day message. Children are the future; and it is easier to instill good nutrition habits than to change bad ones. Nationally, the Dole Company has partnered with the Society of Nutrition Education in developing an interactive CD-ROM program for children in the third or fourth grades. Dole also has a 5 a Day world wide web site on the Internet. During the 5 a Day Week in September, students were able to ask President Clinton questions about fruits and vegetables through the Internet. Thus far, over 1,800 CD-ROM's have been distributed to over 600 different schools in Wisconsin. The CD-ROMs and other materials are free to third and fourth grade teachers.

In addition to the activities coordinated by the nutrition and education training program, several thousand children have been a part of tours through local produce departments. These tours are arranged by the local schools and the local produce department managers. The Copp's and Roundy's Corporations offer these tours to schools.

5 a Day Week Activities for 1996

Five a Day Week is the second week of September. Activities conducted to heighten awareness included: a Governor's Proclamation, and mailing of information to local health departments, WIC projects, family planning projects (heightening the relationship of folic acid intake to the prevention of neurotube defects), and parish nurses. The elderly nutrition sites of Wisconsin brought the theme of fruits and vegetables from the yesteryear to their centers statewide. A lecture on antioxidants was held for dietitians in the Milwaukee area by Gordon Schectman, MD.

Table 2: Single serving sizes of fruits and vegetables.
One medium piece of fruit or 1/2 cup of small or cut up fruit
3/4 cup of 100% fruit juice
1/4 cup of dried fruit
1/2 cup raw or cooked vegetables(such as lettuce, spinach)
1/2 cup cooked beans or peas (such as lentils, pinto beans, kidney beans)

Discussion

The above activities would not have been accomplished without the support of the coalition members. Wisconsin is fortunate to have a group of coalition members who rise to the challenge when funding or staff time is needed. The industry and growers members, such as the Wisconsin Potato Association and Wisconsin Apple Association, have been strong supporters of the 5 a Day message because they realize that incorporating a health message into their marketing efforts makes for good business. Wisconsin retailers have found a 6%-7% increase in produce sales in the grocery stores utilizing the 5 a Day materials.

Increasing the consumption of fresh fruits and vegetables will lead to improved health and lower rates of cancer and other chronic diseases. It is estimated that 30% of all cancer is attributed to diet[2]. The evidence for a protective effect of greater fruit and vegetable consumption is consistent for cancers of the stomach, esophagus, lung, oral cavity and pharynx, and colon. The types of fruits or vegetables

that most often appear to be protective against cancer are raw vegetables, allium vegetables, carrots, green vegetables, cruciferous vegetables, and tomatoes. Major dietary theories include a relationship between a high fat consumption to breast and colorectal cancers; high alcohol intake to respiratory, gastrointestinal, breast and liver cancers; and low fiber intake to colorectal cancer.

Despite the widely-acknowledged benefits from eating more fruits and vegetables, few Americans eat five servings a day. The baseline study for the 5 a Day-for Better Health project, conducted in September of 1991, found that just 8% of American adults think they should eat five or more servings of fruits and vegetables each day; 66% think two or fewer are sufficient. The average adult daily fruit and vegetable intake is about 3-° servings, and only 23% of adults report consuming five or more servings of fruits and vegetables a day. In Wisconsin, the 1994 Behavioral Risk Factor Surveillance System asked questions about fruit and vegetable consumption. Only 21% reported consuming at least five servings of fruits and vegetables per day. Men were less likely to report consuming five a day, compared with women (17% versus 25%).

Anecdotal reports indicate that 5 a Day interventions are increasing fruit and vegetable consumption. Staff in WlC clinics and schools have reported that those individuals who received information concerning the 5 a Day message have increased their consumption. WlTl television station, Milwaukee, recently ran a three-part story on the 5 a Day project and its messages. The story featured those fruits and vegetables containing the greatest amount of Vitamin C, Vitamin A and fiber. After the story ran, the Roundy's Corporation in Milwaukee reported a 62% increase in the sale of red pepper and a 48% increase in sweet potato. These were two of the produce items highlighted in the story.

Table 3: Suggestions for increasing your consumption of fruits and vegetables.

- Try one new fruit or vegetable each week
- Double normal serving sizes of vegetables
- Eat fruit on cereal or muesli (not just banana but also apples, grapes, berries, peaches, and mandarin oranges).
- Have all vegetable based meals (e.g., vegetable chili or stew)
- Eat fruit as a snack
- Drink fruit or vegetable juice instead or soft drinks
- Have fruit salads for dessert (layer fruit with yogurt or add a few chocolate shavings or nuts to a bowl of fruit)
- Have baked fruit for dessert (e.g., apples, peaches, pears or bananas)
- Take raw vegetable platters to parties (include raw sweet potato sticks, asparagus, green beans, red pepper, zucchini, broccoflower, in addition to the more common carrot and celery sticks)
- Add vegetables to favorite entrees (e.g., tacos, spaghetti, pizza, lasagna)
- Make frozen fruit kabobs for kids (use pineapple, bananas, strawberries)
- Eat vegetarian meals more often
- Eat more international dishes (e.g., Italian pasta primavera, Mexican vegetable enchiladas, oriental stir-fry, Indian curries, or greek vegetables moussaka)

Look for the posters, the recipe cards, and the logo on the plastic bags the next time you are in the produce department. Consider complimenting the produce manager for promoting the message. Remember, when you pick up an orange or order a dark leafy green lettuce salad for lunch, you are taking a simple step toward reducing your risk of cancer by providing your body with numerous protective factors.

We know most patients listen to their physicians and view you as a credible source of accurate nutrition information. To reduce the risk of your patients developing certain cancers, you can promote the 5 a Day message. If you would like to share this simple, positive message with your patients, attractive, easy-to-read brochures are available free of charge by calling the National Cancer Institute at 1-800-4-CANCER. The first 25 brochures are free, for quantities greater than 25 a fee to cover postage will be charged. These brochures could easily be incorporated into patient education materials or anticipatory guidance provided by you or your staff. A limited supply of posters and Dole CD-ROMs are available by calling Diane Moreau-Stodola at 414-448-5228. For more information about the 5 a Day for Better Health Project or the Coalition, call the Wisconsin Bureau of Pubic Health or 1-800-4 Cancer.

References

1. Steinmetz K, Potter J. Vegetables, fruit, and cancer prevention: A review. *Journal of American Dietetic Association*, 1996;96:1027-1039.
2. Remington PL. Preventable causes of death in Wisconsin. *Wis Med J* 1994 Mar;93(3):125-6,128. ❖

*What's New In...*Radiation Oncology

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Introduction

One hundred years after the discovery of x-rays, the application of its ionizing potential in a therapeutic fashion continues to increase in number, scope and refinement. From early efforts at disease palliation, this modality now plays a central role in the cure of many malignancies and is also beginning to experience a resurgence in specific non-oncologic settings. The primary intent of most radiotherapeutic strategies is improved local tumor control, which is the first prerequisite in curing a malignancy. Several years ago, Dr. Herman Suit estimated that if optimal strategies were available to maximize delivery of radiation therapy to permit one hundred percent local control, an additional 40,000 (Table 1) lives could be saved from cancer.[1] Over the last decade since Suit's analysis, there have been continued advances in radiation therapy delivery and its scheduling with surgery and/or chemotherapy, with recent data showing a decreased overall mortality from cancer in the United States for the first time this century.

The developments of the last decade have therefore placed significant emphasis on various technological advances that make improved local control possible. Examples include: conformal and three-dimensional treatment planning; charged particle radiotherapy; intraoperative radiation; stereotactic radiation and brachytherapy. Another "new frontier" approaches this problem not so much from the technological as from a drug development perspective. Several agents can be combined with radiation to enhance its effectiveness. Examples include: traditional chemoradiotherapy approaches; the use of chemotherapeutic agents as radiosensitizers; hypoxic and non-hypoxic cell sensitizers and the use of boronated compounds to enhance the effectiveness of radiation cell kill. Radiation cell kill can also be enhanced by the addition of other physical cell damaging agents, and an example of this strategy includes the combination of hyperthermia with ionizing radiation. Biological knowledge about tumor cell kinetics has spawned an entire generation of clinical trials exploring altered fractionation as a methodology to improve the therapeutic ratio of tumor control to normal tissue toxicity. A very attractive "work in progress" is systemic radiotherapy, utilizing intravenous administration of non-specific radioisotopes for palliative purposes or the use of "smart" radioimmunoconjugates with therapeutic intent. This form of "systemic radiotherapy" evolved from previous experience with hemibody, total body and total lymphoid irradiation for various disease applications that still have valid indications. The most exciting new developments, however, are not necessarily those with immediate clinical application; fundamental biological research is beginning to unfold the genetic basis of radiation effect and repair and the intricate interplay of oncogenes and tumor suppressor genes in this context. Finally, the last two years have been marked by substantial new applications of radiation for benign diseases.

It is neither possible, nor the intent of this brief review, to comprehensively cover all of these exciting developments. Instead, we present a brief sampling of some of these topics, with relevant clinical examples, to highlight their immediate applicability. In keeping with the objectives of a generalist audience, the recently evolving field of radiation molecular biology is not addressed in this review.

Conformal/three-dimensional radiotherapy

Although the concept of a dose-response relationship has been known in radiotherapy for decades, actual prescription practices have relied not so much on the total dose necessary to eradicate a tumor, but on the safest total dose that can be delivered without exceeding the tolerance of normal surrounding critical tissues. Therefore, whereas certain malignancies such as Hodgkin's lymphoma and germ-cell tumors can be readily controlled and cured with moderate doses of radiation, the local con-

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Table 1: Mortality decrease with optimized local control

Head and neck	2,000	Ovary	4,000
Cervix	2,700	NSCLC	7,200
Bladder	3,000	Colorectal	17,000
Prostate	3,600	TOTAL	39,500

Data from reference 1.

trol and cure of several other neoplasms is severely curtailed by the inability to exceed the tolerance of critical structures. For example, when treating nonsmall cell lung cancer (NSCLC) in the postoperative situation where one is dealing with microscopic residual disease, the use of 50 Gy radiation results in greater than 90% local control, but in the context of gross residual disease, the "maximum tolerable dose" (MTD) of approximately 60 Gy results in local control of less than 20%.[2,3]

In large part, this is a "geometric" problem that can be solved by three major recent developments including: the advent of computerized tomographic radiation planning which permits precise delineation of tumor and normal tissue; the development of three-dimensional (3-D) and conformal treatment planning software which allows utilization of non-traditional radiotherapy beam arrangements, in several different planes, if necessary (non-coplanar) to avoid or minimize dose to normal tissues; and finally, the development of sophisticated computers capable of handling large amounts of data. As a consequence, this concept of computerized radiation treatment planning has become an extremely active research and development arena in radiation therapy. At present, clinical trials are being undertaken to define the MTD at various sites; several single-institution trials are underway and the Radiation Therapy Oncology Group (RTOG) has recently commenced multi-institutional trials for prostate and lung cancer.[4] Doses in excess of 80 Gy, representing approximately a 33% increase in total dose, have already been safely delivered. Once the MTD is established, randomized trials are planned to define the magnitude of benefit.

Stereotactic radiation

The principles of 3-D radiotherapy married to neurosurgical techniques of stereotactic localization with invasive, immobilizing frames have resulted in this rapidly proliferating radiotherapeutic application. Initially envisioned as a methodology to obliterate small intracranial targets for functional indications such as pain control or obsessive-compulsive movement disorders, radiosurgery has evolved over the last ten years into a very useful and integral therapeutic component in the management of patients with various brain lesions. Several technologies, ranging from fixed multi-cobalt sources to linear accelerators, have been utilized for this purpose. From a modest beginning of less than half a dozen facilities in the mid-80s, current projections indicate the

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Table 2: Resection vs. radiosurgery (brain metastases)

	n	MS (wk)	KPS >70	CNS Death (%)	LC (%)
Radiotherapy (RT)					
Patchell	23	15	8	50	52
Noordijk	31	26	15	33	NS
Surgery + RT					
Patchell	25	40	38	29	80
Noordijk	32	43	33	35	NS
Radiosurgery + RT	122	56	51	25	87

n = number of patients; MS = median survival; KPS = functional independence as defined by duration of maintenance of KPS >70 (measured in weeks); CNS = central nervous system; LC = local control. Patchell and Noordijk = 2 randomized trials. Data from reference 8.

Table 3: Cost-effectiveness surgery vs. radiosurgery for brain mets

	RT	RS/RT	Surgery/RT	RS/RT**
Effectiveness: med survival (yr)	0.4	1.1	0.8	0.8
Median cost ($)	6,500	15,102	22,018	15,102
Average C/E ($/med survival)	16,250	13,729	27,523	18,878
Incremental benefit (yr)	N/A	0.7	-0.3	0.4
Incremental cost ($)	N/A	8,602	6,916	8,602
Incremental C/E ($/extra yr of life)	N/A	12,289	38,795	21,505

**Data from "equi-efficaciousness" assumptions; C/E = cost-effectiveness; med = median; yr = years; RT = radiotherapy; RS = radiosurgery. Data from reference 8.

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existence of several hundred radiosurgery facilities.[5]

The major success of this technique for benign disease has come from its ability to achieve complete obliteration of small, inoperable intracranial arteriovenous malformations with a single large fraction of radiation. Obliteration rates approximating 90% have been achieved, and clearly, several thousand lives have been saved by this technology.[6] The dramatic impact on vascular endothelium, in conjunction with the anti-proliferative potential of large fraction radiation, raised the possibility that such a technique could also be very useful in controlling highly vascular, well-defined benign intracranial neoplasms such as vestibular schwannoma and meningioma. Indeed, local control rates in excess of 90% have been reported for these tumors, and radiosurgery is beginning to challenge the traditional surgical management paradigms for some of these benign tumors.[7]

Because of the relatively well-localized nature of brain metastases and poor control with conventional radiotherapy, radiosurgery has been utilized in select patients with this condition. A review of over a thousand metastases treated radiosurgically revealed control rates over 80%.[5] We have recently published a multi-institutional analysis comparing surgical resection and radiosurgery for well-selected patients with single brain metastases, demonstrating comparable clinical outcome and superior cost-effectiveness for radiosurgery (Tables 2, 3). In fact, based on our national projections, we foresee annual savings in the order of several hundred million dollars for this condition alone.[8] Such outcome research analysis have become a common feature of radiotherapy research in the 1990s, and for a procedurally-based modality like radiotherapy, these have become a key component to ensure appropriate usage in the changing health-care environment.[9] Randomized trials to validate this experience in brain metastases as well as in primary brain tumors (malignant glioma) are currently underway through the RTOG. In addition, a major new development in this field is the use of non-invasive frames permitting repeat fixation and fractionated stereotactic radiotherapy, a modality that is becoming increasingly more viable.[10]

Table 4: Case-control study of brachytherapy for GBM

	Brachytherapy	Control	p
Patient number	35	40	N/A
Median survival (months)	27	11	<0.004
% 1-year survival	87	40	<0.001

GBM = glioblastoma. Data from reference 12.

Brachytherapy

The application of intraluminally- or interstitially-placed radioisotopes for enhancing local control is a relatively old idea in radiotherapy. However, technological advances in terms of newer radioisotopes, computer-controlled devices, ultrasound technology, fiberoptic endoscopes and improved local sedation/anesthesia techniques have revolutionized this modality. The "old days" of inserting isotopes into patients with considerable personnel exposure and in-patient requirements have been replaced by high dose rate remote afterloading machines resulting in minimization of patient discomfort, elimination of in-patient stays and improved personnel safety. The University of Wisconsin has developed a major gynecologic brachytherapy program with this technology and is considered a premier training ground and model to emulate.[11]

Randomized trials in the 1990s have in fact confirmed the curative potential of brachytherapy in at least three disease sites. Case-matched single institution trials had indicated that brachytherapy boost significantly prolonged survival (Table 4) and a recent randomized Brain Tumor Cooperative Group (BTCG) study confirmed this observation.[12-13] Two prospective trials from China and India have validated the curative value of brachytherapy boost (Table 5) in cancer of the esophagus.[14-15] Harrison and colleagues have reported on the benefit of using brachytherapy boost in patients with high grade extremity sarcomas. One hundred and twenty-six such patients were randomized after complete excision to receive brachytherapy to the tumor bed or not; with a minimum follow-up of 4 years, local control was significantly improved in the brachytherapy arm at 90%, compared to 69% in the control group ($p = 0.013$).[16]

Perhaps the most exciting recent application of brachytherapy is in the management of prostate cancer, the leading male malignancy in the U.S. Although extemal beam radiotherapy produces substantial disease control, there are several "serologic failures" as measured by persistently elevated prostate specific antigen (PSA) levels. As a consequence, until recently, radical prostatectomy has been advocated as the treatment of choice for early, localized prostate cancer. Using transrectal ultrasound guidance, Blasko and colleagues have perfected a transperineal interstitial implantation technique, using either Palladium or iodine seeds, re-

sulting in homogenous high dose radiation to the prostate. In a series of almost 300 patients with early stage prostate cancer, they have achieved serologic cure in 93% of their patients. This minimally invasive technique has several advantages over radical prostatectomy, including reduced mortality, improved quality-of-life and possibly even a cost advantage.[17] The fact that prostate cancer will be diagnosed in 215,000 US males this year highlights the potential impact of this new, highly effective, low morbidity treatment. Indeed, non-medical journals have recently cited its potential. (Ref. Grove, A., "Taking on prostate cancer." *Fortune*, May 13, 1996.)

Hypoxic cell sensitizers

The presence of hypoxic areas within most tumors is a well established clinical fact. Recent direct intratumor measurements have confirmed this observation.[18] Several pieces of clinical and laboratory evidence point to such hypoxia as a significant factor accounting for relative radioresistance of several tumors. A number of techniques to overcome hypoxia have been proposed, and in a recent meta-analysis, Overgaard demonstrated that by 1995, over 10,000 patients had been treated on 83 randomized trials to overcome hypoxia. Both locoregional tumor control and survival were improved in these trials on the arms utilizing hypoxic cell sensitization, especially for malignancies of the head and neck and bladder.[19]

Based on convincing evidence from a meta-analysis of the data, there has been a renewed thrust to target hypoxia. Most of this work, utilizing carbogen breathing and nicotinamide, has taken place in Europe, in large measure due to lack of direct interest from the US National Cancer institute (NCI) or a commercial sponsor in the US. Recent experimental evidence has demonstrated that tumors contain chronically hypoxic areas due to hypoperfusion as a consequence of the distance to the nearest capillary, as well as dynamically changing regions of acute hypoxia due to transient vasoconstriction. The former can be positively modulated with carbogen (95% oxygen plus 5% carbon dioxide) whereas the latter can be modulated by nicotinamide, an over-the-counter nutritional additive that has vasodilatory capabilities. This combination results in substantial radiosensitization, and several clinical trials are currently underway in Europe, under the auspices of a program known as ARCON (accelerated radiotherapy, carbogen and nicotinamide).[20] Unfortunately, because nicotinamide is an over-the-counter product, commercial sponsorship and regulatory obstacles have prevented widespread evaluation of ARCON in the US. With over a dozen European trials currently underway, there is considerable optimism that this strategy will find application in the US in the near future.

Non-hypoxic cell sensitizers

The primary hypothesis driving the use of these agents is the fact that in several instances, even well-oxygenated tumor cells display considerable resistance to the effects of radiotherapy. Aerobic sensitizers such as the halogenated pyrimidines, which are structural analogs of the nucleoside thymidine, become incorporated into the DNA of proliferating cells and render them more radiosensitive. Several clinical trials with iododeoxyuridine (IUdR) and bromodeoxyuridine (BUdR) have now been conducted, with the most promising results seen in high grade primary brain tumors which are typically fatal with most patients dying within six to 24 months. A multi-institutional trial from California demonstrated considerable survival improvement when BUdR was added to the conventional therapeutic regimen for anaplastic astrocytoma patients; median survival improved to 252 weeks from 157 weeks.[21] This agent is therefore now being tested in a prospective randomized trial. Other studies with IUdR have corroborated this observation

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Table 5: Prospective trials of endoesophageal boost (EBT)

Arm	Radiotherapy	RT/EBT	Radiotherapy	RT/EBT
Author	Zhao	Zhao	Sur	Sur
Year	1990	1990	1992	1992
Patient number	100	100	25	25
Local control (%)	39	57	25	71
Dysphagia relief (%)	--	--	38	71
% 1-year survival	56	78	47	78
% 3-year survival	19	31	--	--
% 5-year survival	10	17	--	--

RT = radiotherapy. Data from references 14, 15.

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including trials ongoing at the University of Wisconsin (Table 6).

Two separate approaches to improve halogenated pyrimidine radiosensitization are currently being pursued. The University of Michigan group has concluded from their laboratory experiments that short, repeated exposures to these agents will produce sustained sensitization without substantial hematologic toxicity. This observation was based on constant levels of IUdR incorporation into DNA after approximately seven days. Based on this, they are exploring hyperfractionated radiation therapy with five day IUdR infusions every other week during radiotherapy. Our group at the University of Wisconsin, on the other hand, is pursuing a prolonged continuous infusion strategy, based on the observation that although the percent incorporation in a given cell may not change beyond seven days, the proportion of tumor cells incorporating the agent is a direct function of the duration of infusion, and ultimately, it is the proportion of cells not radiosensitized that determine outcome.[22]

Other research areas in this field are being pursued; these include the development of an oral formulation of IUdR, sensitization with 5-fluorouracil (5-FU) and fluorodeoxyuridine, etc. At present, the most direct application in the clinic is radiosensitization with 5-FU. Clinical trials of this agent and radiation have-been carried out for over 25 years. The most convincing data supporting possible radiosensitization come from rectal cancer patients. The Gastrointestinal Tumor Study Group (GITSG) randomized 202 patients with Stage II or III rectal cancer to surgery followed by observation, or 5-FU and methyl-CCNU, or radiotherapy plus 5-FU and methyl-CCNU. Overall survival, local control and time to recurrence were all improved in the combination arm.[23] Further confirmatory studies without methyl-CCNU have since validated this observation, and a recent consensus conference at the Nathnal Institutes for Health recommended combined postoperative 5-FU and radiotherapy as the most effective management for patients with Stage II and III rectal cancer.

Other classic chemotherapy agents that are being explored as potential radiosensitizers include the platinum analogues, hydroxyurea, taxol, eflornithine, gemicitabine and topoisomerase I inhibitors. Two recent randomized clinical trials for NSCLC have demonstrated the potential value of platinum analogues. The most widely quoted positive trial, reported by SchaakeKoning, was conducted by the European Organization for Research and Treatment of Cancer (EORTC) and compared the addition of daily or weekly cisplatin to 55 Gy radiotherapy alone, with the daily cisplatin (6 mg/m2) arm yielding a statistically superior two-year survival rate of 26% compared to 13% with 55 Gy alone. As expected, this approach resulted in net radiosensitization with improved locoregional control, but did not influence metastatic patterns. The time to local recurrence was significantly longer in the group receiving daily cisplatin. Daily cisplatin provided "additional local control" at 1- and 2-years of 18 and 12%, respectively.[24]

Altered fractionation

Historically, fractionated radiotherapy has exploited the differential sensitivity between tumor and normal tissue by using once-daily radiation fractions of 1.8 to 2 Gy to a total dose of 60 to 70 Gy over six to seven weeks. The recent recognition from cell kinetic studies that several tumors have extremely short potential doubling times and hence considerable proliferative capacity during standard fractionated radiotherapy has spawned an entire generation of trials using twice- and thrice-daily radiation therapy with the dual intent of escalating total biologically-effective dose and shortening the overall treatment time.

The first generation trials focused on hyperfractionation. Here, the principle was to utilize fraction sizes smaller than 1.8 to 2 Gy (generally 1 to 1.5 Gy per fraction), usually delivered twice a day, over a total time span similar to conventionally fractionated radiation. Although no major overall shortening of the radiotherapy course occurred, the total biologically-effective tumor dose increased. Since delayed toxicity is primarily a function of fraction size, the use of smaller fraction sizes ensured that late toxicity was not enhanced. Several major trials, primarily in lung and head and neck cancer, were carried out by the RTOG and EORTC. Of the three randomized

Table 6: Radiosensitization studies: anaplastic astrocytoma

Study	Sensitizer	MS (Mo)	% 1-Yr S	% 2-Yr S
Hegarty	IA BUdR	N/A	100	65
Levin	IV BUdR	63	80	65
Urtasun	IV IUdR	N/A	74	68
Sullivan	IV IUdR	N/A	71	57

Survival for anaplastic astrocytoma treated with halogenated pyrimidines; iododeoxyuridine (IUdR) or bromodeoxyuridine (BUdR), given intra-arterially or intravenously. MS = median survival (in months); N/A = not yet reached; S = survival. Data from references 5, 21, 22.

Table 7: Phase III hyperfractionation studies for head and neck cancer

Study	Sites	n	Dose/fx	Dose	Outcome	p
EORTC	op	356	1.15 bid	80.5	5-yr local control 56%	0.01
			2 qd	70	2-yr local control 38%	
Datta	o, op, L	91	1.2 bid	79.2	2-yr local control 63%	0.001
		85	2 qd	66	2-yr local control 33%	
Pinto	op	50	1.1 bid	70.4	CR 86%; 42 mo surv 27%	0.02
		48	2 qd	66	CR 64%; 42 mo surv 8%	

op = oropharynx; o = oral cavity; L = larynx; n = number of patients; fx = fraction; qd = once daily; bid = twice daily; yr = year; CR = complete response rate; mo = month; p = probability. Data from references 25, 26.

Phase III hyperfractionation trials reported, the most convincing data (Table 7) come from an EORTC trial in T2/3 N0/1 oropharyngeal cancer treated either to 70 Gy in seven weeks with a conventional regimen or to 80.5 Gy in seven weeks using twice-daily 1.15 Gy fractions. The actuarial five-year locoregional control rate improved from 38% for the conventional arm to 56% for the hyperfractionated arm (p=0.01).[25] In an Indian study of patients with T2/3 cancers of the oral cavity, oropharynx and larynx, twice-daily 1.2 Gy fractions to 79.2 Gy was compared to 66 Gy in 2 Gy daily fractions; two-year locoregional control increased from 33 to 63%, in favor of the hyperfractionated arm (p=0.001).[26]

Similar efforts have been carried out for NSCLC and in a recent three-arm randomized RTOG trial, results (Table 8) from hyperfractionated radiation (1.2 Gy twice-daily to 69.6 Gy) were found to be superior to conventional radiation (2 Gy once-daily to 60 Gy) and similar to conventional radiation plus chemotherapy.[27]

The next generation of trials incorporated the principle of shortening overall treatment time, i.e., "acceleration." The clinical validity of this concept was provided by a 47 patient head and neck cancer EORTC trial which compared a 5-week accelerated hyperfractionated schedule to a conventional 7.5 week schedule in patients with Stage II or III squamous cell carcinoma. Prior to treatment, the proliferative capacity of the tumor, expressed as potential doubling time, was assayed for each patient. The randomization to the therapeutic arms was done without prior knowledge about the potential doubling time. Patients with short potential doubling times, i.e., rapidly proliferating neoplasms, benefited substantially in terms of local control when randomized to the accelerated arm.[28] Recently, such acceleration has been tested in a multinational Phase III trial for head and neck and inoperable NSCLC. The regimen known as CHART (continuous hyperfractionated accelerated radiotherapy) demonstrated clinically meaningful and statistically significant survival advantage (Table 8) in non-small cell lung cancer.[29] The University of Wisconsin, together with the Eastern Cooperative Oncology Group (ECOG), has just completed a similar U.S. trial with promising results.[30]

Benign diseases

The last two years have been marked by substantial new applications of radiation for benign diseases. Historically, radiation has been utilized for a variety of benign dermatologic, autoimmune and hyperproliferative conditions without the benefit of well-designed randomized trials, and hence subject to several criticisms regarding efficacy and toxicity. This situation has undergone radical improvement with the recognition that the antiproliferative potential of well-targeted and controlled radiation can indeed be put to excellent clinical use. It is not the intent of this review to summarize these applications in detail, but rather to provide two examples as proof of principle and to illustrate possible future growth areas.

Macular degeneration remains a major uncontrollable cause of blindness in the elderly. The hallmark of the disease is the formation of proliferating subfoveal choroidal neovascularization (CNV) which typically increase in size over time, thereby constricting the visual fields. Laser photocoagulation of subfoveal CNV is recommended if the patient is willing to accept a large decrease in visual acuity immediately after treatment. A large proportion of patients with subfoveal CNV do not meet the guidelines for laser photocoagulation. Ionizing radiation may prevent the proliferation of endothelial cells of newly formed subretinal capillaries and may induce obliteration of the aberrant new vessels. In one recent study, visual acuity was maintained or improved in 78% and 63% of radiation-treated patients at their six- and 12-month follow-up examinations, respectively.[31] By contrast, visual acuity showed steady deterioration in 86% of controls. Significant neovascular membrane

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Table 8: Radiotherapy, chemoradiotherapy and altered fractionation trials for non-small cell lung cancer

Author	Study	Arm	Survival: Median, % 1-3 Years			
			M	1	2	3
Dillman	CALGB 8433	qd RT	9.6	40	13	10
Sause	RTOG 8808	qd RT	11.4	46	19	6
Schaake-Koning	EORTC	qd RT	--	46	13	2
Le Chevalier	IGR	qd RT	10	41	14	4
Saunders	CHART	qd RT	@12	@50	20	@10
Cox	RTOG 8311	bid RT	13	56	29	@20
Sause	RTOG 8808	bid RT	12.3	51	24	13
Saunders	CHART pilot	tid RT	@15	64	34	@18
Saunders	CHART	tid RT	@15	@61	30	@20
Tannehill	ECOG 4593	tid RT	13.3	57	--	--
Dillman	CALGB 8433	CT+RT	13.7	54	26	24
Sause	RTOG 8808	CT+RT	13.8	60	32	15
Schaake-Koning	EORTC	RT+qwk CT	--	44	19	13
Schaake-Koning	EORTC	RT+qd CT	--	54	26	16
Le Chevalier	IGR	CT+RT	12	51	21	12

qd = once daily; bid = twice daily; tid = thrice daily; qwk = once weekly; RT = radiotherapy; CT = chemotherapy; @ = estimated from survival curves; M = median survival in months. Data from references 3, 24, 27, 29, 30.

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regression, as measured by image analysis, was recorded in 68% and 77% of treated patients at six and 12 months postradiation, whereas the membranes in all control patients showed progressive enlargement. With further follow-up in all radiotherapy treated eyes, the appearance of the scar ranged from subtle subretinal pigmentary changes to dense subretinal fibrosis. By contrast, all untreated fellow eyes showed marked subretinal scarring. Scars in radiotherapy-treated eyes occupied an area that was approximately one-third of that in untreated fellow eyes (3.8 mm^2 v 11.7 mm^2). Distance and near-visual acuities in radiotherapy-treated eyes were significantly better than that of untreated fellow eyes ($p < 0.0033$). This study suggested that low doses of radiation can maintain central vision and induce regression of subfoveal neovascular membranes in a significant proportion of patients. Randomized trials are underway.[31]

A second unique application of radiation for benign diseases utilizes brachytherapy. Coronary restenosis has proven to be the "Achilles heel" of percutaneous coronary interventions, frequently leading to repeat procedures in over 30% of patients. The current specific target of radiotherapeutic approaches is neointimal proliferation, especially because this is the most dominant mechanism of restenosis after stent placement. A recently reported randomized trial demonstrated that low dose intravascular radiation diminished the restenosis rate in patients with recurrent coronary artery stenosis who were undergoing stent placement to 17% in comparison to 54% for the unirradiated group.[32] This reduction translated into major clinical benefit, including a reduction in mortality. After 12 months, the number of deaths, heart attacks and need for repeat angioplasty or bypass surgery was 15% in the radiation-treated group and 48% in the control group. The exact mechanisms are not clearly understood, but this promising application is being tested in several confirmatory trials.[32]

Conclusions

In the last ten years, major changes have taken place in the field of radiotherapy, encompassing all aspects from basic molecular biology to sophisticated technical advances. The pace of change is accelerating. There is a clear recognition that new technologies need to be rigorously scrutinized in the context of clinical trials and subsequently subjected to outcomes analysis. This is a very healthy environment for continued progress and change in the field, and it is gratifying to note the rapidity with which advances in the field are finding routine clinical applicability, resulting in improved survival, local control, organ preservation and improved quality-of-life with the added societal benefit of cost-effectiveness. One hundred years after Roentgen's discovery of x-rays, the application of these "wondrous beams" for therapeutic purposes continues at a dramatic pace.

References

1. Suit HD, Westgate SJ: Impact of improved local control on survival. *Int J Radiat Oncol Biol Phys* 1986;12:453-458.
2. Weisenburger TH: Effects of postoperative mediastinal radiation on completely resected Stage II and Stage III epidermoid cancer of the lung. LCSG 773. *Chest* 1994;106:297S301 S.
3. Le Chevalier T, Arriagada R, Quoix E, Ruffie P, Martin M, Tarayre M, Lacombe-Terrier MJ, Douillard JY, Laplanche A: Radiotherapy alone versus combined chemotherapy and radiotherapy in non-resectable non-small cell lung cancer: first analysis of a randomized trial in 353 patients. *J Nat Cancer Inst* 1991;83:417-23.
4. Graham MV, Purdy JA, Emami B, Matthews JW, Harms WB. Preliminary results of a prospective trial using three-dimensional radiotherapy for lung cancer. *Int J Radiat Oncol Biol Phys* 1995;33:993-1000.
5. Mehta MP, Kinsella TJ: The physical, biological and clinical basis of radiosurgery. *Current Problems in Cancer* 1995;19:267-329.
6. Steiner L, Lindquist C, Adler JR, Torner JC, Alves W, Steiner M: Clinical outcome of radiosurgery for cerebral arteriovenous malformations. *J Neurosurg* 1992;77:1-8.
7. Flickinger JC, Kondziolka D, Pollock BE, Lunsford LD: Evolution in technique for vestibular schwannoma radiosurgery and effect on outcome. *Int J Radiat Oncol Biol Phys* 1996;36:275-280.
8. Mehta MP, Noyes WN, Craig B, Lamond JP, Auchter R, French M, Johnson M, Levin AB, Badie B, Robins HI, Kinsella TJ: A cost-effectiveness and cost-utility analysis of radiosurgery versus resection for single brain metastases. *Int J Radiat Oncol Biol Phys* 1997 (in press).
9. Bastin KT, Buchler DA, Stitt JA, Shanahan T, Pola Y, Paliwal BR, Kinsella TJ: Resource utilization. High dose rate versus low dose rate brachytherapy for gynecologic cancer. *Am J Clin Oncol* 1993;16:256-263.
10. Shrieve DC, Tarbell NJ, Alexander E lil, Kooy HM, Black PM, Dunbar S, Loeffler JS: Stereotactic radiotherapy: a technique for dose optimization and escalation for intracranial tumors. *Acta Neurochirur* 1994;62(S):118-123.
11. Sarkaria JN, Petereit DG, Stitt JA, Hartman T, Chappell RJ, Thomadsen BR, Buchler DA, Fowler JF, Kinsella TJ: A comparison of the efficacy and complication rates of low dose rate versus high dose rate brachytherapy in the treatment of uterine cervical carcinoma. *Int J Radiat Oncol Biol Phys* 1994;30:75-82.
12. Wen PY, Alexander E lil, Black PM, Fine HA, Riese N, Levin JM, Coleman CN, Loeffler JS: Long-term results of stereotactic brachytherapy used in the initial treatment of patients with glioblastomas. *Cancer* 1994;73:3029-3036.
13. Green SD, Shapiro WR, Burger RC, Selker RG, VanGilder JC, Saris S, MalKin G, Mealey J, Neal J, Robertson JT, Olson J: A randomized trial of interstitial brachytherapy (RT) boost for newly diagnosed malignant glioma: Brain Tumor Cooperative Group (BTCG) Trial 8701. *Proc Am Soc Clin Oncol*. Dallas, Texas 1994; pp 174.
14. Zhao RF, Zhang PH, Wang HG: Combination of external irradiation and intracavitary Cs137 radiotherapy for esophageal carcinoma. *Chin J Radiat Oncol Phys Biol* 1990;4:8587.
15. Sur RK, Singh DP, Sharma SC: Radiation therapy of esophageal cancer: role of high dose rate brachytherapy. *Int J Radiat Oncol Biol Phys* 1992;22:1043-1046.
16. Pisters PW, Harrison LB, Leung DH, Woodruff JM, Casper ES, Brennan MF: Long-term results of a prospective randomized trial of adjuvant brachytherapy in soft tissue sarcoma. *J Clin Oncol* 1996;14:859-868.
17. Blasko JC, Wallner KE, Grimm PD, Ragde H: PSA-based disease control following ultrasound-guided 1-125 implantation for Stage T_1/T_2 prostatic carcinoma. J Urol 1995;1 54:1 096-1 1 00.
18. Ralebh JA, Dewhirst MW, Thrall DE: Measuring tumor hypoxia. *Sem Radiat Oncol* 1996;6:37-45.
19. Overgaard J, Horsman MR: Modification of hypoxia-induced radioresistance in tumors by the use of oxygen and sensitizers. *Sem Radiat Oncol* 1996;6:10-21.
20. Rojas A: ARCON: accelerated radiotherapy with carbogen and nicotinamide. *Br J Radiol Supplement* 1992;24 :174-178.
21. Levin VA, Wara WM, Gutin PH, Wilson CB, Phillips TL Prados M, Flam M, Ahn DK: Initial analysis of NCOG 6G82-1: Bromodeoxyuridine (BUdR) during irradiation followed by CCNU, procarbazine and vincristine (PCV) chemotherapy for malignant gliomas. *Proc Am Soc Clin Oncol* 1990;9:91.
22. Kinsella TJ: An approach to the radiosensitization of human tumors. *Scientific American Cancer Journal* 1996;2:184-193.
23. NIH Consensus Conference. Adjuvant therapy for patients with colon and rectal cancer. *JAMA* 1990;264:1444-1450.
24. Schaake-Koning C, van den Bogaert W, Dalesio O, Festen J, Hoogenhout J, van Houtte P, Kirkpatrick A, Koolen M, Maat B, Nijs A, Renaud A, Rodrigus P, Schuster-Uitterhoeve L, Sculier JP, van Zandwijk N, Bartelink H: Effects of concomitant cisplatin and radiotherapy on inoperable non-small cell lung cancer. *N Engl J Med* 1992;326:524-530.
25. Horiot JC, Le Fur R, N'Guyen T, Chenal C, Schraub S, Alfonsi S, Gardani G, Van Den Bogaert W, Danczak S, Bolla M: Hyperfractionation versus conventional fractionation in oropharyngeal carcinoma: final analysis of a randomized trial of the EORTC cooperative group of radiotherapy. *Radiother Oncol* 1992;25:231-241.
26. Datta NR, Choudhry AD, Gupta S: Twice- a-day versus once-a-day radiation therapy in head and neck cancer. Int J Radiat Oncol Biol Phys 1989;17 (S1):132.
27. Sause WT, Scott C, Taylor S, Johnson D, Livingston R, Komaki R, Emami B, Curran WJ, Byhudt RW, Turrisi AT, Dar R, Cox JD: Radiation Therapy Oncology Group (RTOG) 88-08 and Eastern Cooperative Oncology Group (ECOG) 4588: Preliminary results of a Phase III trial in regionally advanced, unresectable non-small cell lung cancer. *J Nat Cancer Inst* 1995;87:198-205.
28. Begg AC, Hofland I, Moonen L, Bartelink H, Schraub S, Bontemps P, Le Fur R, van den Bogaert W, Caspers R, Van Glabbeke M: The predictive value of cell kinetic measurements in a European trial of accelerated fractionation in advanced head and neck tumors: an interim report. *Int J Radiat Oncol Biol Phys* 1990;19:1449-1453.
29. Saunders MI, Dische S, Barrett A, Parmar MKB, Harvey A, Gibson D: Randomized multicenter trials of chart vs. conventional radiotherapy in head and neck and non-small cell lung cancer: an interim report. *Br J Cancer* 1996;73:1455-1462.
30. Tannehill SP, Froseth C, Wagner H, Petereit DP, Mehta MP: A multi-institutional Phase II study of hyperfractionated accelerated radiation therapy for unresectable non-small cell lung cancer. Initial report of ECOG 4593. *Int J Radiat Oncol Biol Phys* 1996;361(S):207.
31. Hart PM, Archer DB, Chakravarthy U: Asymmetry of disciform scarring in bilateral disease when one eye is treated with radiotherapy. *Br J Ophthalmol* 1995;79:562-568.
32. Teirstein PS, Massullo V, Jani S, Popma JJ, Mintz GS, Russo RJ, Schatz RA, Steuterman S, Morns NB: Radiation therapy following coronary stenting-6-month follow-up of a randomized clinical trial. Proceedings of the 69th Scientific Sessions of the American Heart Association. New Orleans, LA 1996; pp 1-210. ❖

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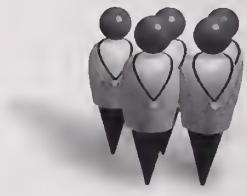

MetaStar Matters

Depression in the Elderly

Dale R. Tavris, MD, MPH; Paul J. Rock, MS; Kris Miesbauer, RN; and Jay Gold, MD, JD, MPH, Madison

Depression is a very common problem, and it has serious consequences. According to the Agency for Health Care Policy and Evaluation (AHCPR) the prevalence of clinically significant depressive symptoms in patients with a non-psychiatric general medical condition is approximately 12%-16%. Depression greatly increases the risk of suicide, it may make a person's other medical conditions more difficult to treat, and even in the absence of these problems it greatly reduces a person's quality of life.

Prevalence of depression in the elderly is much higher than it is at younger ages. Because of the high prevalence of other medical conditions in the elderly, and the overlap of symptomatology between depression and other medical conditions, the diagnosis of depression in the elderly can be very complex and difficult. Further increasing the difficulty of diagnosis is the fact that many elderly will not admit to feeling sad (even when asked), and many health care providers consider depressive symptomatology in the elderly "normal and just a part of the aging process." Although in one sense it may be accurate to look at depression of the elderly in this way (since depression is in fact very common in the elderly), the bottom line is that the identification and treatment of depression in the elderly are likely to significantly improve their health and quality of life.

MetaStar has been conducting a quality-improvement project with eight Wisconsin hospitals with the purpose of increasing awareness of the need to consider the diagnosis of depression in patients who are seen for medical care for other reasons, and encouraging health care providers to develop plans that will facilitate the diagnosis of depression, thereby decreasing the probability that it will be missed and thereby fail to be treated.

As part of this project, we analyzed claims data and found that only 3.9% of Medicare patients hospitalized with a non-psychiatric primary diagnosis from July 1993 through the end of June 1994 had a secondary diagnosis of depression. If the above noted estimate by AHCPR is correct (prevalence of depression in patients seeking medical care for non-psychiatric reasons being 12-16%), it would suggest that depression is greatly under-diagnosed in Wisconsin hospitals. Actually, the extent of under-diagnosis is probably even greater than what is suggested by these figures, since the patients included in this analysis were all elderly, a group that is characterized by a significantly higher rate of depression than the general population.

One possibility that we had to consider was that many depressed patients are diagnosed and treated, even though a formal diagnosis of depression is not made (in which case there would be no indication of depression in the claims data). We looked into this possibility by reviewing 100 randomly-chosen medical records of hospitalized patients *without* a primary or secondary diagnosis of depression. In only one of these 100 records was there any indication that depression had been addressed. Thus, this analysis constituted further evidence that depression is greatly under-diagnosed in hospitalized Wisconsin patients.

Another issue we looked at was the correlation between suicide

MetaStar Matters is not reviewed by the *WMJ* Editorial Board. Dr Tavris is Associate Clinical Coordinator; Mr Rock is Data Analyst; Ms Miesbauer is Project Coordinator; and Dr Gold is Senior Vice President and Principal Clinical Coordinator, and all are associated with MetaStar. Reprint requests to Jay A. Gold, MD, JD, MPH, MetaStar, 2909 Landmark Place, Madison, WI 53713.

and secondary diagnosis of depression (in patients hospitalized for other reasons), by geographic area of residence. The hypothesis was that, if health care providers in certain geographic areas were less thorough in diagnosing depression (in patients seeking medical care for other reasons), depression would be adequately treated less often, and therefore suicide would be more likely in those areas, thus creating a negative association between secondary diagnosis of depression and suicide.

There were 587 suicides in Wisconsin in 1993, a rate of 11.65 per 100,000 population. There were 7,902 secondary diagnoses of depression in Wisconsin Medicare patients discharged from acute care Wisconsin hospitals between 7-1-93 and 6-30-94 with non-psychiatric primary diagnoses -- a rate of 3.83 per 100 discharges. There was highly statistically significant variation by geographic area of residence (defined by the first three digits of the zip code there were 17 such areas) in suicide rates ($p<.005$) and by hospital in secondary diagnosis of depression rates ($p<.005$). We used simple linear regression to correlate the suicide rates and the secondary diagnosis of depression rates, by geographic area of residence, and found a statistically significant *inverse* correlation between the two ($p<.05$., R squared=.20 -- The R squared value is the percentage of variation in one variable predicted by the other). In other words, suicide rates were higher in those areas characterized by low secondary diagnosis of depression rates -- thus supporting the above hypothesis.

MetaStar met with eight hospitals that collaborated with us in this project. We presented data to them that indicated the prevalence of diagnosed depression among Medicare patients hospitalized at their hospital for non-psychiatric reasons, as well as comparisons with similar data from other Wisconsin hospitals and the suicide analysis described above. We also discussed with them the importance of diagnosing depression and the rationale for developing a system for ensuring that all patients are adequately considered for this diagnosis. In addition to encouraging all physicians to have a high index of suspicion for depression, other suggested ways of increasing depression diagnosis (for consideration) were to have nurses screen patients, and to screen for depression with self-administered questionnaires. The collaborating hospitals were then asked to develop a quality improvement plan to increase the likelihood that hospitalized depressed patients will be diagnosed and treated. We will follow up in a few months to determine the extent of change in secondary diagnosis of depression rates in collaborating hospitals, compared to other Wisconsin hospitals, as part of an evaluation of the success of this project. ❖

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Some Considerations in the Closing of a Physician's Practice

Kalisa Barratt, JD, SMS Assistant General Counsel

While there are few formally slated rules for closing a medical practice, there are several important items that should be considered and planned for in advance. The list below is not complete, but should prove helpful.

1. Notification of patients
Patients should be given adequate, written notice of the date you plan to close your office. A minimum of three months is suggested so that they will have sufficient time to obtain another physician. You should draft a letter to be sent to your active patients (those you have seen in the past two years.) At a minimum, the letter should inform the patient the date the office will close and include a consent form for the release of records should the patient wish records be sent to the new treating physician. Consider sending these letters certified mail in the case of post-operative patients or those receiving complicated care. You should retain a list of all patients notified by mail in your files.

You can save postage, in the case of current patients, by inserting the letter with the monthly statement or billing; letters to other patients will have to be mailed separately. You may also wish to place an announcement in one or more local papers.

2. Retention of medical records
(a) It is your responsibility to maintain or provide for the maintenance of the medical record within the confines of Wisconsin law. This means the records must be kept confidential and reasonably safe. The present rule for physician's office records is that the medical records must be kept a minimum of five years after the last date of treatment.

Medical records, including case histories, treatment records, x-rays, laboratory reports, correspondence with physicians and others should not be destroyed until the statute of limitations has expired with regard to each patient. This is because the patient's record will be the chief source of defense in a future lawsuit.

Generally, the statute of limitations on a malpractice suit will be no longer than five years although it may be longer for minors and patients with mental illness. However, given the varying manner courts have dealt with the statute of limitations, the State Medical Society suggests physicians keep medical records for a minimum of ten years from the date of treatment. Certain records should be kept indefinitely. Those involved in litigation should be kept until the litigation is resolved, which may take several years. Contact your malpractice insurance carrier for its policies relating to record retention.

(b) Under Wisconsin law, the patient has the right to access and request copies of his or her medical records. Thus, you should make it known where such records can be obtained after you close your practice. This, too, may be achieved by including an insert into patient's bills, posting a notice in the office and/or publishing a notice in the paper. Consider following the legal notice requirements pertaining to solo practitioners, below. Copies of records may be given to the patient or forwarded to another physician upon the written consent of the patient. Whether you charge the patient for costs associated with copying the records will be up to each individual physician.

Kalisa Barratt, JD

(c) The Wisconsin Statutes relating to the examination or inspection of medical records upon patient authorization read:

> "146.83 Access to patient health care records. ...any patient ... may, upon submitting a statement of informed consent, (a) Inspect the health care records of a health care provider pertaining to that patient at any time during regular business hours upon reasonable notice. (b) Receive a copy of the patient's health care records upon payment of reasonable costs. ..."

This article is based on an article published in the June 1987 *Wisconsin Medical Journal*, written by Sally Wencel, JD. It has been updated to reflect current state and federal law.

(d) Retiring Solo practitioner's responsibilities.

Following are specific requirements in the law for physicians who are in solo practice:

1. *Maintenance of records.* Wis. Stat. §146.819, physicians retiring from solo practice must provide patients notice where and by whom the records will be maintained. If the physician has died, the physician's personal representative must provide this notice to patients. If the physician or the personal representative finds a records custodian to maintain the patient records, the custodian must state in writing that the records will be maintained in compliance with the records statutes, Wis. Stat. sections 146.81 through 146.835.

2. *Record Destruction.* If the solo practice physician or the physician's personal representative elects to destroy some or all patient records (preferably after the statute of limitations has run), patients must first be given written notice of the intent to destroy.

3. *Notice Requirements.* The notice to patients must be mailed by first class mail to the patient's last known address or published by class 3 notice (public notice) in a newspaper published in the county in which the physician practiced. If records are to be destroyed, this notice must be provided at least 35 days before the records are destroyed and must specify where and when the records may be retrieved. Class 3 notice means that the notice must appear in the newspaper once a week for three consecutive weeks. Wis. Stats §985.07. The last notice must appear one week before the act or event specified. Thus, to comply with the 35 day notice, physicians should publish the first notice four weeks before the 35 days begins to run.

3. Destruction of medical records
Destruction of medical records should be carried out in accordance with federal and state law. What should be in the forefront of destruction considerations is notifying patients prior to destruction and maintaining patient confidentiality. *Records in any open investigation, audit or litigation should not be destroyed.*

▲ Manner of destruction
Any technique that ensures information remains confidential, such as burning or shredding. If destruction is done by an external company, the contract with company should include indemnification provisions in case of breach of confidentiality and proof of destruction. Consider requiring the company post a bond.

▲ Document destruction
Keep a permanent index of destroyed records. Include: date and method of destruction, patient name, dates of service, signature of person witnessing destruction, and a note that the records were destroyed in the ordinary course of business.

▲ Computerized record destruction
Data should be permanently destroyed, not merely file name deletion. Total destruction includes overwrite of back-up tapes.

▲ Notification of patients
Although not required by law (except in the case of solo practitioners, above) practices should consider notifying patients before record destruction. Easiest, most cost-effective notice is in the legal notice section of a newspaper. Consider allowing patients to have the originals in lieu of destruction and document such.

4. Disposal of drug stocks, prescription pads
The Regional Administrator of the Drug Enforcement Administration, Chicago, Illinois, has jurisdiction over the State of Wisconsin with regard to disposal of unused controlled substances. The following procedure has been approved as a guide to physicians:

> "The physician's DEA number (Controlled Substances Registration Certificate), unused Government order forms and controlled drugs should be disposed of as soon as possible. The registration certificate and unused Government order forms (DEA-222c) should be returned to the Drug Enforcement Administration, 219 South Dearborn, Suite 500, Chicago, Illinois 60604. Procedures for destruction of controlled substances may be obtained by calling the Chicago Divisional Office.

Forms and additional information may be obtained from the Drug Enforcement Administration, Chicago Divisional Office, 219 South Dearborn, Suite 500, Chicago, Illinois 60604 (312)353-7875.

In addition to destroying drug stocks, all prescription pads should be destroyed. You must also keep your narcotics ledger for at least two years.

5. Sale of medical practice
(a) If you are selling your practice to another physician, you should make certain that the buyer is a physician licensed, or eligible to be licensed, in Wisconsin. This information can be obtained from the State Medical Society or the Wisconsin Department of Regulation and Licensing.

Continued on next page

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(b) Records relating to patients should not be sold. However, the sale may include, as one of its terms, unlimited access to the records of those patients who seek the services of the purchasing physician.

(c) Sale of a practice implicates both the Stark law and the Federal Medicare Fraud and Abuse laws especially where the physician later becomes an employee of the buyer. Some of the laws' requirements are that the payments for the practice are not made in installments and that the practice is sold at fair market value. If you are considering this type of arrangement, you should contact legal counsel to ensure that the transaction fits into one of the safe harbors and/or Stark exceptions.

6. Keeping your license in force
You may wish to keep your license in force and register each year in the event that you wish to do some consultation work or are called upon to perform some act of medical practice in an emergency. If you elect to keep your license in force, you will be required to continue to meet the continuing medical education requirements. This requirement calls for 30 hours of Category I credit as defined in the Physician's Recognition Award of the American Medical Association, to be accumulated every two years. The Medical Examining Board requires this regardless of extent or nature of practice; there are no exceptions due to age or retirement.

7. Malpractice insurance
Your policy should be examined to determine whether it is written on an OCCURRENCE or a CLAIMS MADE basis. Consult your insurance agent. If the policy is written on a CLAIMS MADE basis, only those claims made while the policy is in force will be covered. You should either continue your coverage or purchase coverage extension (known as TAIL INSURANCE) to protect you until all statutes of limitation have run.

8. Accounts receivable
Not all of your patients will have paid their bills by the time your practice is closed. It will be necessary to have someone available to accept, record, and deposit payments received after the official closing of your practice. Thus, you should keep the practice's bank account open well past the closing. You may also wish, after a suitable waiting period of three or four months, to turn those accounts still unpaid over to a reputable collection agency. Remember that these agencies will charge you a percentage of collections.

9. Continuation of SMS membership
We hope that you will continue to be active in organized medicine. The State Medical Society urges all physicians who are retired or will be retiring to advise their county or state society of their present or future status so that an appropriate change in classification can be arranged. Send SMS a letter notifying us that you'd like to change to retired status. At present, retirees enjoy free limited SMS membership.

10. Income and payroll taxes
Copies of your income tax returns and all supporting documentation, including ledgers and accounting records, should be preserved until the Internal Revenue Service can no longer assess additional tax. For Federal returns filed on time and containing all correct and pertinent data, this is usually three years; for returns where gross income has been understated by 20% or more, it is six years; for fraudulent returns or where no return has been filed there is no time limit.

Final returns and payments of all Federal and state withholding and Social Security taxes must be made after the last employee has been terminated and the last payroll paid.

Other considerations
If you have contractual obligations, you should review each contract for specifics relating to terminating the contract. Examples of these might include: office lease, managed care contracts, answering service contracts, and equipment leases. Further, many of the contract documents should be kept for at least six years after you close your practice. Other important documents, such as the corporation's articles of incorporation and bylaws and your professional liability policy should be kept indefinitely.

Conclusion
This article has highlighted some issues you should consider when closing a practice. As always, it is recommended that you work closely with your attorney or business manager on the many aspects of closing your practice.

If you have any specific questions, you may contact Kalisa Barratt, Assistant General Counsel, at SMS ext. 233 or via e-mail at: KALISAB @smswi.org, or contact Mark Adams, General Counsel, at SMS ext. 234 or via e-mail at: MARKA @smswi.org.❖

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The Medical Outcomes Research Project Asthma Study

Bruce B. Berry, MD, Milwaukee and Sally L. Wencel, JD, Madison

"Mrs. Berhagen is in the ED again, Bruce. Her asthma has acted up again and she has not cleared after breathing treatments and five hours of observation. She can't go home like this--you'll have to admit her to the hospital. . ."

As I listened to the emergency department physician present the case to me, I began to wonder how this could be happening. Mrs. Berhagen is a 26-year-old, intelligent young woman who has had asthma since she was a teenager. She knows what to do with her asthma, she is on all the right medication, she knows how to prevent an exacerbation from getting this bad.

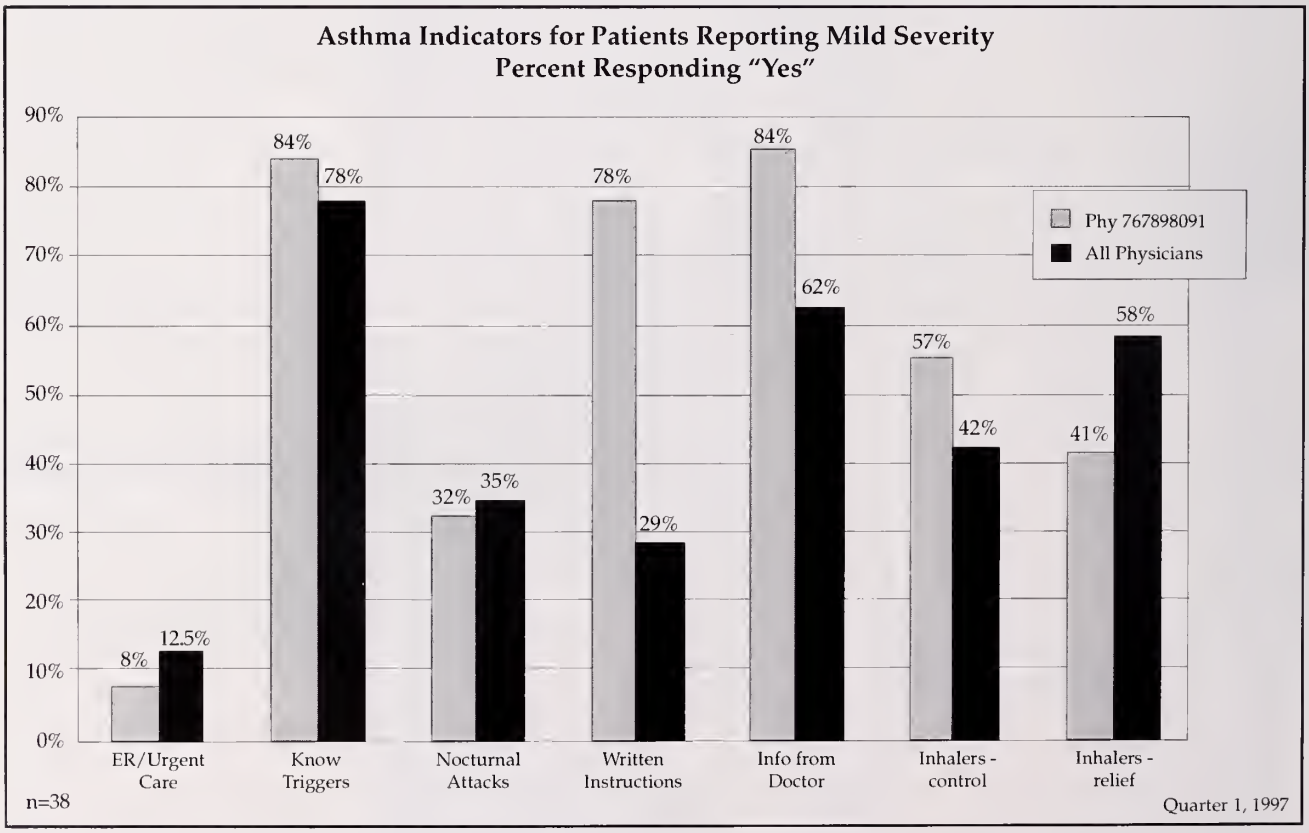
After I did my History and Physical, I was surprised to learn from her that she still smoked, albeit socially. She also did not receive a flu shot this year, and she has never had a pneumovax. She tells me for the first time that she misses about two days a month of work because of her asthma, and she still hasn't figured out what actually causes it to flare up at times.

I thought, "How could this be? I told her to be aware of triggers, to stop smoking and to get a flu shot every year."

Of course, I wasn't as sure as I could have been, that I had actually told her all these things since I haven't seen her in nearly three years. She manages herself with OTC meds, and an albuterol inhaler as needed.

The next morning, this case struck me even more as I thought about how many other asthmatics I must be taking care of how, like Mrs. Berhagen, are not benefiting from state-of-the-art asthma care. Why aren't they benefiting? Is it because I am not keeping up? Perhaps they are not coming in to see me or when they do, they forget everything I tell them. Maybe it is because I think they are already being treated properly. After all, how many treatment failures can I remember -- not many considering the number of asthmatics I care for.

How often do these questions go through our minds as treating physicians? How difficult it is to search for honest answers to these questions when we do not have any real data to support our impressions. Most of our asthmatics get flu shots, most of them are on steroid inhalers, most of them know how to manage flare ups....



The need for measurement

The plural of anecdote is not data. "We manage what we measure" is a theorem that can be applied to medicine just as it is to business. The numbers we see regularly are those that we actively respond to and try to influence. Sure, we take care of individual patients, but without that quantitative basis, we do not hold ourselves truly accountable.

It is paradoxical how we pride ourselves on being scientists, yet we do not objectively measure the outcomes of the 25 experiments each of us run every day. Every time we see a patient, we form a hypothesis to explain the etiology and treatment of their condition. Rarely do we follow that up with objective measurement. Anecdotal measures filter in, both good and bad. The good results we remember, most of the bad ones we forget or rationalize away.

Why study asthma?

The State Medical Society, through its charitable, educational and scientific foundation, the SMS Foundation, offers a forum for physicians to look objectively at the outcomes of care for specific patient populations. In 1994, the SMS Foundation Medical Quality Research Council identified asthma as one of the first conditions for study through its Medical Outcomes Research Project.[1]

Asthma is a condition that affects an estimated 7% of the state's adult population or 237,000 and 8% or 105,000 of its children.[2] Wisconsin's adult asthma rate is double the national average of 4%. Adults in low-income households were more likely to have been diagnosed with asthma (8% versus 6% for other adults). During 1985-1990, the estimated medical costs of asthma care in the US increased from $4.5 billion to $6.2 billion, and in 1985 these costs represented approximately 1% of total US health-care costs.[3] As a chronic condition, asthma accounts for an estimated 463,000 hospitalizations, nearly 2 million emergency department visits, and more than 6.5 million ambulatory visits to physicians.[4]

In addition to being a prevalent and costly chronic disease, asthma is classified among the ambulatory care sensitive conditions that if managed effectively on the outpatient basis should not lead to hospitalizations. Research suggests that the rate of hospitalizations for ambulatory-sensitive conditions is influenced by a number of factors, often grouped in three categories: access to primary care, management in the outpatient setting, and health status of the population.[5] Some variation in hospitalization rates in Wisconsin may be due to prevalence of disease or condition among certain populations. For example, Wisconsin hospital data from July, 1990 through June, 1992 indicated that hospital admission rates for Wisconsin asthmatics were 1 per 1,000 population, with African Americans experiencing a rate of 3.66 per 1,000.[3]

Defining process is not enough

National guidelines for asthma treatment have been published years ago[6] and are currently being updated. It is hard to consistently implement those practices in the day to day course of taking care of thousands of patient who could conceivably be utilizing hundreds of different guidelines. Yet studies have been published to show the benefits of specific processes of care such as flu shots,[7] use of written patient education plans[8] and knowledge of triggers.[9] Despite all this good information, we must ask how often are these beneficial interventions actually being used by patients and providers?

Care of asthmatic patients varies widely -- some of that variation is warranted by differences in patient case mix, but much of that variation is a result of the health care services they are offered. In one study, researchers studied asthma care provided in the ambulatory-care setting across a metropolitan area. Variation in treatment was more often explained in terms of a system failure rather than a failure of the provider's knowledge. Potential failures in asthma

Continued on next page

Asthma Study Group Members

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Continued from previous page

treatment processes were due to variation in patient education, compliance, behavior and environment.[10] Therefore, problems with asthma care may not be based on provider knowledge or competence but rather variations in the care process or patient case mix factors.

The asthma study group

Measurement produces data which in turn are used to produce information, which leads to knowledge, which ultimately can be used for improvement. The Asthma Study Group began meeting in early summer of 1996 with the mission of establishing a method for improving the value of care we, as physicians in Wisconsin, deliver to our patients afflicted with asthma. The Asthma Study Group membership included primary care physicians (family practice, internal medicine, pediatrics) and asthma specialists (allergy, pediatric allergy, pulmonology). In the following pages you will find an outline of the methods the team used, and how they plan to help you produce measures that will provide you with improvement knowledge to make your patients' quality of life better.

The Asthma Study Group identified the following reasons for measuring asthma care:

- this is science
- it will improve patient outcomes
- it will help develop disease management programs
- it will improvement process of care: patient education and compliance
- it will improve patient satisfaction with care
- it can help improve performance measurement rating (HEDIS 3.0 testing set measure)
- it will prove high quality of primary care treatment
- it will prove to employers good care, cost effectiveness and accountability
- it will prove Wisconsin is an excellent place to receive health care

Finally, it was pointed out that this study can be "fun" by giving physicians a tool for gaining a historical perspective of treating and managing asthma in their practice setting.

The asthma study plan

What resulted from the Group's efforts was the Asthma Study Plan that is detailed in the following pages. The Asthma Study Group fashioned its study hypothesis (research question):

We can improve outcomes of care through feedback of process and outcomes measures to physicians and educational efforts aimed at providers and patients.

This hypothesis identifies the need to link process with outcomes measures through a valid method of collecting asthma information. (*Part of measurement tool page 64*) It also recognizes that the Asthma Study's chief role is to provide feedback to physicians who use this methodology, providing both benchmarking data and process improvement data (*chart , page 58*). As a follow up to the collection and analysis of asthma process and outcomes data, the Study Group identified the need to consider education as an important intervention. This education takes the form of both feedback to physicians of best

Asthma and Demographics Report: Individual Patient

Patient	767898091	Survey Date: 01/22/97
Clinic	76599232	
Physician	23242334	
Sex: Female	Age: 26	

The patient reported the following **health conditions**:
15. Asthma
18. Sciatica/chronic back problem

Asthma Questionnaire, Key Indicators

Condition:	Mild
Compared to 1 year ago:	About the same
ER/Urgent care visit, past month?	No
Days missed from work,school, in the past month...	2
Nocturnal Attacks:	Less than once a week
Packs of Cigarettes/Day	Less than 1 pack
Know triggers?	No
Received enough info. from doctor?	Yes
Inhalers for relief? (Albuterol, Maxair, Alupent, Ventolin, Proventil, Brethair)	Yes
Inhalers for control? (Tilade, Intal, Cromolyn, Azmacort, Vanceril, Beclovent, Aerobid, Flovent, Pulmicort)	No
Received written instructions?	No

practices (processes of care) and development and dissemination of patient education materials describing and encouraging cooperation with asthma treatment protocols.

Over the next six months, the Asthma Study Group met monthly to design the Asthma Study Plan for release to Wisconsin providers in early 1997. Through this extensive study and consensus development, the Group maintained its orientation toward its mission and the general goals of the Medical Outcomes Research Project: Ensure accessibility of clinicians and patients, develop a plan that will yield meaningful information to physicians and patients, and focus on patient centered outcomes of care, including satisfaction and access.

Measuring for Improvement

Measurement is the cornerstone of improvement. Although we are not accustomed to making measures of disease specific processes or outcomes of care, the time to begin is now. We as providers of care can begin to use this information to focus our efforts for improvement where they are most needed. For example, if we are already doing a good job of getting our patients vaccinated for influenza but measures show a low rate of patient compliance with inhaled corticosteroid use, then our energy should be spent on improving steroid use accordingly. Benchmarking information can help us form targets for various process and outcomes rates, and by working with other providers we can share information on achieving those targets. The State Medical Society of Wisconsin through its scientific and educational foundation is making it possible to measure, compare and improve in a cooperative manner.

It will be our ability to work together and share "best practices" for achieving processes and outcomes that this project's success will be ultimately judged. The Asthma Study Group is convinced that by taking these first steps of agreeing to make objective measure, we will end up cooperating, and therefore achieving ideal health outcomes for our patients, and for the communities we serve.

For more information about the Project and how you can become involved, please contact Sally Wencel at SMS ext. 324 or by e-mail: SALLYW@smswi.org.

References

1. Ingalls JM, Wencel SL, Alles PJ.The SMS-CESF Medical Outcomes Research Project. *Wis Med J*,1994; 93(8):433-437
2. 1994 Wisconsin Family Health Survey, Center for Health Statistics, Wisconsin Department of Health and Family Services.
3. Weiss KB, Gergen PJ, Hodgson TA. An economic evaluation of asthma in the United States. *N Engl J Med* 1992;326:862-6
4. Weiss KB, Zimmerman EM, Gergen PJ, Mullally DI, Hodgson TA. Special report of the NIAID task force on immunology and allergy: The socioeconomic impact of immunologic and allergic disease in the United States. U.S. Department of Health and Human Services, Public Health Service: Washington, DC, U.S. Government Printing Office, 1991.
5. Small Area Analysis: Hospitalizations for Ambulatory Care Sensitive Conditions in Southeastern Wisconsin 1992-94; Office of Health Care Information, March 1996.
6. National Asthma Education Program. *Guidelines for the diagnosis and management of asthma*. Bethesda, MD: National Institutes of Health, No. 91-3042. August 1991.
7. Nichol K, Margolis K, et al. Efficacy and cost effectiveness of vaccination against influenza amongst elderly persons living in the community. *N Eng J Med* 1994;331,778-784.
8. Beasley R, Cushely R, Holgate ST. A self management plan in the treatment of adult asthma. *Thorax* 1989;44:200-204.
9. Barnes PJ. Inhaled glucocorticoids for asthma. *N Eng J Med* 1995; 332(13)868-875.
10. Headrick L, Katcher W, Neuhauser D, McEachern E. Continuous quality improvement and knowledge for improvement applied to asthma care. *J Quality Improvement* 1994;20:562-568.❖

Asthma Study Plan

STUDY HYPOTHESIS: "We can improve outcomes of care through feedback of process and outcomes measures to physician and educational efforts aimed at providers and patients."

I. STUDY SITE

The Project is designed to allow any willing physician to participate (please see "Memorandum of Understanding.") There is no stated requirement that all physicians from each participating office or clinic participate in the study.

II. PATIENT ELIGIBILITY AND ENROLLMENT

A. ELIGIBILITY

Patient Selection
Age: 14 - 50
One ER, urgent care or hospital admission or two outpatient visits within the past 24 months ICD-9 code 493.xx.

Pediatric patients will be included when validated pediatric asthma or generic child health assessment surveys or both are available.

B. ENROLLMENT
(For general information, please refer to Project Data Collection Manual pp. 3-5.)

Patient Consent:
Participation is voluntary and patient informed consent should be obtained. (Project policy: consent form and patient information materials have been prepared. Respondent burden and response rates are not an issue if patients are told the purpose of surveys.)

Enrollment Process
There are two possible ways of identifying potential asthma study participants which do not seem to be mutually exclusive:

(1) retrospective auditing claims information, appointment schedules or medical records; or
(2) continuous open enrollment of patients seen for asthma in the office setting.

Regardless of identification Patient is asked to participate, given information and consent forms. Baseline measurement is taken in office or by mail.

Sampling (minimum patient sample size, sampling strategy)
The Asthma Study suggests a target of 30 patients per site. This targets may be reached over time (cumulative). The more patients each site studies, the higher the statistical power will be available for the site's data.

III. MEASUREMENT TOOLS

Domain	Form
Patient Case Mix	Patient Characteristics survey; Asthma related-health risk (items from asthma specific patient survey)
Process Measures	Patient Asthma Questionnaire
Outcome Measures (clinical and patient-reported)	Patient Asthma Questionnaire
Satisfaction/ Access to care	Health Outcomes Institute Asthma satisfaction and access survey

IV. BASELINE MEASUREMENT PROTOCOL

Protocol:
SF-36 or HSQ 2, Personal Characteristics, asthma specific patient survey and satisfaction and access to care survey using survey administration methodology outlined in the Project Data Collection Manual pp. 5-10.

V. INTERVENTION

As defined by the study question, the intervention will consist of:

1. Provide standardized process and outcomes measurement tools and protocols
2. Provide data feedback (under section VII.)
3. Develop educational materials directly for use by patients and physicians based on findings of asthma study

VI. REMEASUREMENT

Follow-up: Interval: 12 months

Forms: SF 36 or HSQ 2, asthma specific patient form, asthma patient satisfaction and access

VII. REPORTING AND ANALYSIS

The SMS Foundation Medical Outcomes Research Project will be the data repository for asthma data collected through the study plan. Data will be

maintained, secured and released according to the Project's Data Confidentiality and Security Policy (attached). The Project can accommodate data or surveys sent one of three ways:

1) Modem: Data should be sent in .DBF or ASCII fixed format. More detailed instructions will be developed with each project site. The CESF Project is planning to develop an electronic bulletin board for transmission of data and other Project information.

2) Mailed diskettes: Data files on diskette should be in .DBF format if possible, otherwise ASCII fixed format.

3) Mailed forms: Sites working with a data entry vendor may mail forms to the vendor directly. The vendor can then send data on diskette to the Project and the participating site on diskette. Project sites must work with Project staff to ensure that data entry arrangements result in data that corresponds to Project data formats.

4) Fax Scanner: Sites may either fax scannable forms provided by the Project or mail completed forms to the Project.

Patient level reporting

Individual patient SF-36 reports will be developed by the Project and sent (via disk, modem, paper) to participants with population norms and aggregate asthma norms when available. Participating sites will have the key to individual patient identities and treating physicians, and will be responsible for disseminating this information. (The Project does not maintain patient identifiable data and patient files are assigned an up to nine digit number for each participating patient.)

Clinic level reporting

The point of contact between the Project and Asthma Study participant is referred to as the "clinic", even though smaller groups may be participating through individual clinicians. The Project is designed to transfer information back and forth through the clinic liaison. As described above the clinic liaison will have the keys to the identity of enrolled patients and their treating physicians. The chief expectation of the clinic level reporting is to provide benchmarking information to gauge and improve performance. Aggregate reports will be supplied twice a year and include summary SF-36 scores and information on key indicators from the condition-specific asthma form.

Initially reporting from the Project will include the following asthma process and outcomes indicators:

Question (source: Asthma Patient Survey	Domain
7	Frequency of nocturnal attacks
15	Knowledge of triggers
20	Interference with normal social activities
21	Enough information from doctor on managing severe flare up
22	In the past 6 months, ER or urgent care visits for flare-ups
30	Use of inhaled steroids
40	Whether patient received written directions

The reports will include graphical representations of data, one graph for each of the three classes of asthma severity as determined by patient responses to Response Survey question 1. Graphs will include confidence levels or standard error on the aggregate and site scores. A separate set of graphs will include demographic distribution such as age, sex, percent smokers (question 19.) and socioeconomic status. Narrative reports will accompany the graphs explaining the data.

Based on data analysis of other information collected through the asthma patient survey instrument, other indicators may be reported over time.

Asthma Study Group Level Reporting

The Asthma Study Group will regularly review case mix, process and outcomes data as the Study proceeds to look for correlations between the elements. As this information becomes available, the Asthma Study Group may determine additional asthma indicators for distribution to the participating clinics (as described in the previous section).

A primary goal of this health services research is to identify "best practices" and disseminate this information to improve asthma care. The Asthma Study Group will also regularly review the reporting and analysis functions to improve the process and substance of reports as well as evaluate the information needs of the Study. ❖

	Yes	No
15. Do you know what triggers your asthma attacks?	O	O
16. Do you think, or did your doctor tell you, that exposure to something in your WORKPLACE affects your asthma?	O	O
17. Do you think, or did your doctor tell you, that exposure to something in your HOME affects your asthma?	O	O
18. Are you exposed to significant tobacco smoke at home or work?	O	O

19. How many packs of cigarettes do you smoke in one day?
O I don't smoke
O Less than 1 pack
O 1 to 2 packs
O More than 2 packs

20. During the past 4 weeks, to what extent has your asthma interfered with your normal social activities with family, friends, neighbors, or groups?
O Not at All
O Slightly
O Moderately
O Quite a bit
O Extremely

21. Do you feel that your doctor or health care provider has given you enough information about what you should do if you have a severe flare-up of your asthma?
O No, they haven't told me what to do
O They have told me some things, but not enough
O They told me everything I need to know

22. In the **past 6 months**, how often did you go to the emergency room or urgent care facility to get treatment for severe flare-ups of your asthma?
O None O One O Two O Three
O Four O Five O Six O Seven or more

23. In the **past 6 months**, how many times have you had to take steroid pills (Cortisone, Prednisone, Medrol) suddenly or increased your steroid pill dose to control your asthma?
O None O 1 or 2 times O 3 or more

24. Are you taking steroid pills (Cortisone, Prednisone, or Medrol) every day or every other day to control your asthma?
O Yes O No

	No	Yes, Sometimes	Yes, Often
25. Do you ever forget to take your medication?	O	O	O
26. Do you ever take your asthma medication incorrectly?	O	O	O
27. Do you ever skip your asthma medication because of the side effects you think you are having?	O	O	O
28. Do you ever skip your asthma medication because you think you won't need it?	O	O	O

29. In general, how much does asthma affect the quality of your life?
O Not at all
O A little bit
O Moderately
O Quite a bit
O Extremely

What medications do you take for your asthma?	Yes	No	Don't Know
30. Inhalers for relief (such as Maxair, Albuterol, Alupent, Ventolin, Proventil, Brethair)	O	O	O
31. Inhalers for control (Tilade, Intal, Cromolyn, Azmacort, Vanceril, Beclovent, Aerobid, Flovent, Pulmicort)	O	O	O
32. Pills for control (Accolate, Monoclast, Zileuton, Zyflo)	O	O	O
33. Nebulizer with a compressor	O	O	O
34. Other pills or liquids (such as Slo-phyllin, Slo-bid, Theodur, Uniphyll)	O	O	O

Baseline Measurement Protocol sample.

Financial Fitness
Evaluating on-the-job Disability Protection

Michael Dolan, CLU, ChFC, Madison

DISABILITY INCOME insurance--the kind of insurance that replaces income lost when you can't work because of accident or illness --is one of the most important kinds of insurance you can have. Yet many people never give it a thought, perhaps because they assume they are adequately covered on the job.

Before you make that assumption, find out what kind of disability coverage, short-term or long-term, your employer actually provides.

Short-term benefits

Short-term disability benefits are most common. They're required by law for virtually every employer in many of the jurisdictions across the country. And they make up part of the benefits package in most of the medium and large firms nationwide. Employees are usually eligible for short-term benefits starting on the day they're hired. Benefits typically run for under six months, although there's considerable variation. Some plans pay benefits for up to a year, while others provide for just a few days of sick pay.

Long-term benefits

Long-term benefits, which provide an income if you have a serious disability, are another story. Fewer of those employers offering short-term benefits also provide long-term benefits. Those benefits usually start when short-term benefits are exhausted, typically about six months after disability begins. Furthermore, employees usually have to be on the job for six months to a year before becoming eligible.

Do you have adequate disability coverage on the job? Or should you consider an individual policy, either for long-range protection or to tide you over until you become eligible for an employer's plan?

If you need an individual policy, here are the things to consider:

- Monthly benefits, depending on your current income, will provide from two-thirds to three-quarters of that income. No insurer will replace your entire salary; it might be too much incentive to stay home. But disability benefits for which you've paid the premiums are not taxable as income; benefits that result from an employer-paid disability policy are subject to tax.

- You can keep premium costs down by self-insuring for as long as possible, electing to have benefits start after 60 or 90 days instead of 30 days. You can also cut costs by electing to receive benefits for two to five years instead of to age 65, but this would be penny-wise and pound-foolish. The illness you want to insure against is the illness that cuts short your working life.❖

Michael Dolan, CLU, ChFC

Dolan is president and chief operating officer of SMS Insurance Services and a member of the National Associaiton of Life Underwriters. He can be reached at SMS ext. 550, or via e-mail at: MIKED@smswi.org.

Physician Briefs

The * indicates member of the SMS.

Tom Anderson, MD, professor of medicine and chief of hematology/oncology at the Medical College of Wisconsin, will receive a distinguished service award, the college's highest honor, at its 84th commencement exercises. He is also the American Cancer Society, Wisconsin Division, professor of clinical oncology. Dr Anderson has been chief of the division of hematology at the medical college for 17 years.

Douglas Atkins, MD,*a family practitioner, joined the medical staff of the Krohn Clinic and Black River Memorial Hospital, Black River Falls. He earned his medical degree from University of Wisconsin, Madison. Dr Atkins completed his residency in family practice at the St. Joseph's family practice residency program, South Bend, Ind. He is board certified in family practice and is a member of the American Academy of Family Physicians.

Lisa Ann Baratta, MD, a cardiologist, joined the medical staff of St Mary's Hospital of Milwaukee. Dr Baratta earned her medical degree from Northwestern University.

William W. Busse, MD, University of Wisconsin Medical School professor of medicine and head of the allergy and immunology section at University of Wisconsin Hospital and Clinics, has been appointed to the National Heart, Lung, and Blood Advisory Council. He was appointed by Donna Shalala, secretary of the Department of Health and Human Service. Dr Busse earned his medical degree from the University of Wisconsin Medical School, where he also completed his residency and fellowship. He is board certified in both allergy and immunology and internal medicine.

Frank M. Graziano, MD, PhD, University of Wisconsin Medical School professor of medicine and section head of rheumatology at the University of Wisconsin Hospital and Clinics, is the new governor-elect of the Wisconsin chapter of the American College of Physicians. Dr Graziano will serve a one year term beginning in late March and follow with a four-year gubernatorial term.

Linda J. Hill, DO,* a family practitioner, joined the medical staff of the Dells Clinic, Wisconsin Dells. Dr Hill earned her medical degree from the College of Osteopathic Medicine and Surgery, Des Moines, Iowa. She completed her internship at Brighton Medical Center, Portland, Me.

Gregory Hrasky, MD,* an orthopedic surgeon, joined the medical staff of The Monroe Clinic. He earned his medical degree from Rush Medical College in Chicago, Ill. Dr Hrasky completed his residency at Rush Presbyterian-St Luke's Medical Center, Chicago. He received pediatric orthopedic fellowships with Shriners Hospital for Crippled Children in Portland, Oregon and Starship Children's Hospital in Auckland, New Zealand.

David Huante, MD, an internal medicine specialist, joined the medical staff of Southwest Health Center. He earned his medical degree from the University of Michigan, Ann Arbor. Dr Huante completed his residency in internal medicine at the Henry Ford Hospital in Detroit, Mich. Dr Huante was awarded the intern of the year by the internal medicine department and also served as chief medical resident from 1991 to 1992. He is certified by the National Board of Medical Examiners and the American Board of Internal Medicine.

Bruce K. Jacobson, MD,* a surgeon, joined the Rhinelander Medical Center. Dr Jacobson earned his medical degree from Yale University School of Medicine, New Haven, Conn. He completed his residency in general surgery at the University of California-San Francisco Affiliated Hospitals and the University of Wisconsin Hospital and Clinics, Madison, 1991. Dr Jacobson is board certified by the American Board of Surgery and is a fellow in the American College of Surgeons. Dr Jacobson is a member of the Wisconsin Surgical Society, Oneida/Vilas Medical Society and is immediate past-president of the Dane County Medical Society.

Steven J. Kream, MD, an internist and pulmonologist, joined the medical staff of Memorial Hospital, Oconomowoc. Dr Kream earned his medical degree from Washington University School of Medicine, St. Louis, Mo. He completed his internship and residency in internal medicine at Sinai Samaritan Medical Center, Milwaukee. Dr Kream is board certified in internal medicine, pulmonary disease and critical care medicine

Anne Krutchen, MD, a radiologist, joined the medical staff of St Mary's Hospital of Milwaukee. Previous to this she worked as an attending radiologist and assistant professor at St Louis University and Hospital.

Peter Lake, MD, was named the adolescent services medical director for Rogers Memorial Hospital, Oconomowoc. Dr Lake is a child and adolescent specialist with interest and experience in early childhood development, depression, parenting, child behavior management and goal directed treatment planning.

Pradeep Marballi, MD,* psychiatrist, joined the medical staff of Rhinelander Medical Center. Dr Marballi earned his medical degree from the Armed Forces Medical College in Poona, India. He completed his internship at the Naval Hospital in Bombay and his residency in general psychiatry at the Creedmore Psychiatric Center in Queens, NY. Dr Marballi completed a two year fellowship in child and adolescent psychiatry at St. Luke's-Roosevelt Hospital Center in Manhattan, NY. Dr Marballi is certified in psychiatry by the American Board of Psychiatry and Neurology and is a member of the American Psychiatric Association and the Wisconsin Psychiatric Association.

Michael L. Murphy, MD, has been appointed assistant professor of ophthalmology at the Medical College of Wisconsin. Dr Murphy will assume an active role in the training of ophthalmology residents at the Eye Institute. Dr Murphy earned his medical degree from the Medical College of Wisconsin and completed his ophthalmology training at the Eye Institute. He completed a two-year fellowship in oculoplastic, lacrimal and orbital surgery and a six month fellowship in neuro-ophthalmology at the University of Iowa Hospitals and Clinics.

Gregory Pupillo, MD,*a neurologist, joined the medical staff of Franciscan Skemp Healthcare Arcadia Campus Clinic. Dr Pupillo earned his medical degree from Indiana University. He completed his residency at McGill University, Montreal, Quebec Canada and a fellowship in the epilepsy program at Montreal Neurological Hospital.

Gregory L. Schmidt, MD, assistant chairman of psychiatry for the Milwaukee Clinical Campus of the University of Wisconsin Medical School at Sinai Samaritan Medical Center has been promoted to professor of psychiatry at the University of Wisconsin-Madison Medical School. Dr Schmidt earned his medical degree at the University of Pennsylvania, Philadelphia.

Beth Yount, MD,* family practitioner, joined the medical staff of the Mercy Beloit Medical Center. Dr Yount earned her medical degree from the Medical College of Wisconsin in Milwaukee. She completed her residency at Mercy Health System Family Practice Residency Program, Mercy Clinic, Janesville.

Nick Turkal, MD,*was named associate dean for the Milwaukee campus of the University of Wisconsin Medical School and vice president for academic affairs for Aurora Health Care, Milwaukee. Dr Turkal served as program director for the University of Wisconsin Family Practice Residency program at St. Luke's Medical Center and Sinai Samaritan Medical Center.❖

Obituaries

Eckberg, Richard A., MD, 72, a surgeon from Stevens Point, died January 1, 1997. Dr Eckberg earned his medical degree from the University of Iowa in 1948. He completed his internship and residency at the University of Wisconsin Hospital, Madison in 1962. He joined the Navy, through selection in the ROTC program that took him to Northwestern University, Evanston, Ill, where his undergraduate work was completed. Dr Eckberg was a member of the Rice Clinic and St Michael's Hospital, Stevens Point, until his retirement in 1985. He was a member of the American Thoracic Society and the Portage County Medical Society. He served on the Wisconsin Board of Medical Examiners. He is survived by his wife Betty; four children, Richard of Sydney, Australia; Cathryn Butler of Amherst Junction; Laurel Young of Amherst Junction; Mary Eckberg, of Sparta; six grandchildren; and one brother, Philip Eckberg, of Bend, Ore.

Knutson, Kenneth, MD, 70, pediatrician from Wausau, died January 31, 1997. Dr Knutson earned his medical degree from the University of Minnesota, 1955. He completed his internship at St. Lukes Hospital, Duluth, Minn and his residency at the University of Minnesota, 1961. While in the Air Force, he served in Alaska and the Aleutian Islands. Dr Knutson founded the Wausau Clinic with 11 other doctors. He founded the Wausau Medical Center Walk-In Dept in 1985 where he remained until his retirement in 1994. He was a member of the Marathon County Medical Society. He is survived by his wife Barbara; three children: Paul E Knutson, of Austin, Tex; Sarah K Knutson, of Washington, DC; and Mary Louise Knutson of Minneapolis, Minn.

Mathwig, Robert J., MD, 78, a general practitioner from Stanley, died January 23, 1997. Dr. Mathwig earned his medical degree from the University of Louisville Medical School in Louisville, Ky. He completed his internship at Detroit Receiving Hospital in Detroit, Mich. Dr Mathwig served as a battalion surgeon, 117th Infantry, 30th Infantry Division in World War II. He received five battle stars, the bronze star with two oak leaf clusters and the Purple Heart. The battle stars were for campaigns in Normandy, Northern France, Rhineland, Ardennnes, and Central Germany. Following the war, Dr Mathwig joined practices with Dr AW Overgard in July of 1946. Together they built The Stanley Clinic. Dr. Mathwig was a former president of the Chippewa County Medical Society and past president of Victory Memorial Hospital and medical staff. He retired from his medical profession after 40 years in 1986. Dr Mathwig was a 50 Year Club member of the State Medical Society. He is survived by his wife, Ruth; four children, Dr John Mathwig, of Mundelein, Ill; Herbert Mathwig of Oak Forest, Ill; Mary Larson of Ironwood, Mich; Deborah Manlove of St Paul, Minn; six grandchildren; and two great-grandchildren.

Tributes to loved ones can help others

The memorial program of the SMS Foundation offers physicians a unique opportunity to provide a living memorial to a loved one or friend through a gift to the Foundation. A memorial contribution can provide financial aid to a needy medical student, help stimulate research on behalf of the public health or aid in the preservation of Wisconsin's medical history. When a memorial gift is made to the Foundation, the deceased person's family receives a special card with the name of the donor. For more information, contact Julie Hein, Executive Director, SMS Foundation at ext. 323 or via e-mail at: JULIEH@ smswi.org.❖

County Society News

Brown. The Brown County Medical Society approved the following physicians for membership: Tracy L. Hoffman, MD; Samuel L. Grossman, DO; Janice L. Spalding, MD; Elmer Robert Taake, MD; Cynthia B. Lasecki, MD; Charles F. Dais II, MD; Timm S. Missbach, MD; Walter J. Ratschan, MD; Donald Benjamin Jenny, MD; and Laura Vogel-Schwartz, MD.

Chippewa. The following physicians were approved for membership in the Chippewa County Medical Society: Jane D. Byrd, MD; Terrence D. McCanna, MD; and Willie M. Pangilinan, MD.

Dane. The Dane County Medical Society approved the following for membership: Michael I. Goldrosen, MD; Allouddin Khan, MD; Timothy W. Olsen, MD; Andrew Barger; and Karen S. Barker.

Dodge. The Dodge County Medical Society approved the following physicians for membership: Bert C. Callahan, MD; David N. Crouch, MD; Robert D. Heinen, MD; and Thomas D. Meyer.

Eau Claire-Dunn-Pepin. The following physicians were approved for membership in the Eau Claire-Dunn-Pepin County Medical Society: Danielle R. Busse, DO; Richard T. Crane, MD; Timothy R. Gerry, MD; Rae R. Hanson, MD; Charles Todd McMinn, MD; Gregory B. Melby, MD; Michael W. Sullivan, MD; and Lane A Woldum, MD.

Fond du Lac. The Fond du Lac County Medical Society approved membership for Robert T. Obma, MD.

Green. The Green County Medical Society approved membership for Deirdre A. Habermehl, MD; and Grerory M. Hrasky, MD.

Jefferson. The following physicians were approved for membership in the Jefferson County Medical Society: C. Sue Conley, MD; and Gregory A Gehred, MD.

Kenosha. The Kenosha County Medical Society approved membership for the following physicians: Steven A. Goedderz, MD; Bobby L. Yap, MD; Alison R. Sennello, MD; Gregory W. Young, MD; Julie A. Buransky, MD; Robert L. Fields, MD; Robert J. Anderson, MD; and Diane M. Horneij, DO.

Lincoln. The following physicians were approved for membership in the Lincoln County Medical Society: David L. Bluestein, MD; and Ronald J. Krajnik, MD.

Marathon. The Marathon County Medical Society approved membership for the following physicians: James J. Beier, MD; John J. Hugus, MD; and Charles E. Nelson, MD.

Marinette-Florence. The following physicians were approved for membership in the Marinette-Florence County Medical Society: David Yang G. Go, MD; Muhammad S. Ismail, MD; Michael M. Karkkainen, DO; and Darlene K. Mullon, MD.

Polk. The Polk County Medical Society approved the following physician for membership: David A. Ammend, MD.

Portage. The following physicians were approved for membership in the Portage County Medical Society: Karl D. Aldinger, MD; Douglas J. Allen, MD; Andrew J. Braun, MD; Anna W. Cothron, MD; John R. Fuller, MD; John P. Gauder, MD; Dean Robert Hagness, MD; Egbert Kamstra, MD; James A. Kasukonis, DO; Kenneth J. Kellner, MD; Daniel R. Kraeger, DO; Thomas J. McIntee, MD; Kent N. Mittelberg, MD; Paul E. Munck, MD; Thomas P O'Malley, Jr., MD; David A. Polomis, MD; Todd A. Rave, MD; David C. Rupley, Jr, MD; Henry H. Shaw, MD; Timothy J. Wirtz, DO; and Jeanne T. Groos, MD.

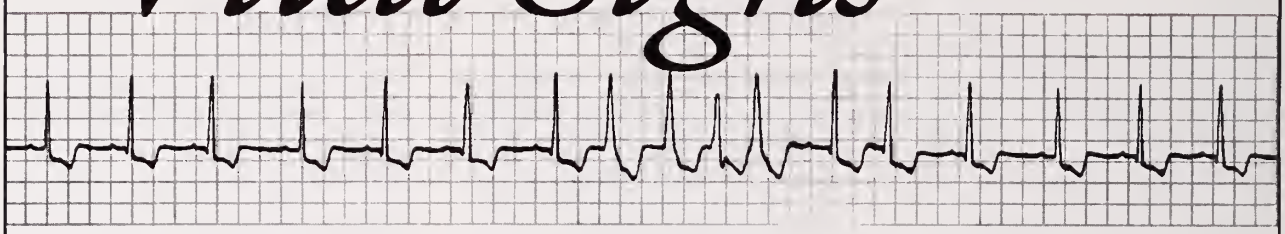
Racine. The Racine County Medical Society approved membership for the following physicians: Leslie M. Fox, MD; Mary Anne K. Miller, MD; and Carroll M. Martin.

Sheboygan. The following physician was approved for membership in the Sheboygan County Medical Society: Gregg M. Gaylord, MD.

Waukesha. The Waukesha County Medical Society approved membership for the following physicians: Stephen R. Bartos, MD; Jose G. Araujo, MD; Sharon A. Bremer, MD; Shirley Y. Godiwalla, MD; Rebecca Webb, MD; and Denise Prehn, MD.

Washington. The following physicians were approved for membership in the Washington County Medical Society: James Eric Breckenridge, DO; Steven W. Holcomb, MD; Daniel T. Kopesky, DO; Jeffery R. Smale, MD; and Terry S. Williamson, MD.❖

Vital Signs



Where can physicians...

- Communicate and take action on issues of ***vital*** importance,
- Obtain educational information ***vital*** to physician performance and practice operations, and
- Establish ***vital*** linkages with colleagues who are employed, hospital-based, managers or medical school faculty?

The 1997 Annual American Medical Association Organized Medical Staff Section Assembly Meeting
June 19-23, Chicago Marriott Downtown
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An educational program presented by a distinguished panel of speakers, who will:

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To register call **800 AMA-3211** and ask for the Department of Organized Medical Staff Services.

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* The American Medical Association designates this educational activity for a maximum of 3 hours in category 1 credit towards the AMA Physician's Recognition Award. Each physician should claim only those hours of credit that he/she actually spent in the educational activity.

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THIS LISTING is compiled by the State Medical Society of Wisconsin in cooperation with others who wish to maintain a centralized schedule of meetings and courses of interest to Wisconsin physicians and to avoid scheduling programs in conflict with others. Hospitals, clinics, specialty societies, and medical schools are particularly invited to utilize this listing service. There is a nominal charge for listing of Continuing Medical Education courses at the following rates: $1.25 per word, with a minimum charge of $30.00 per listing. *All listings must be prepaid.*

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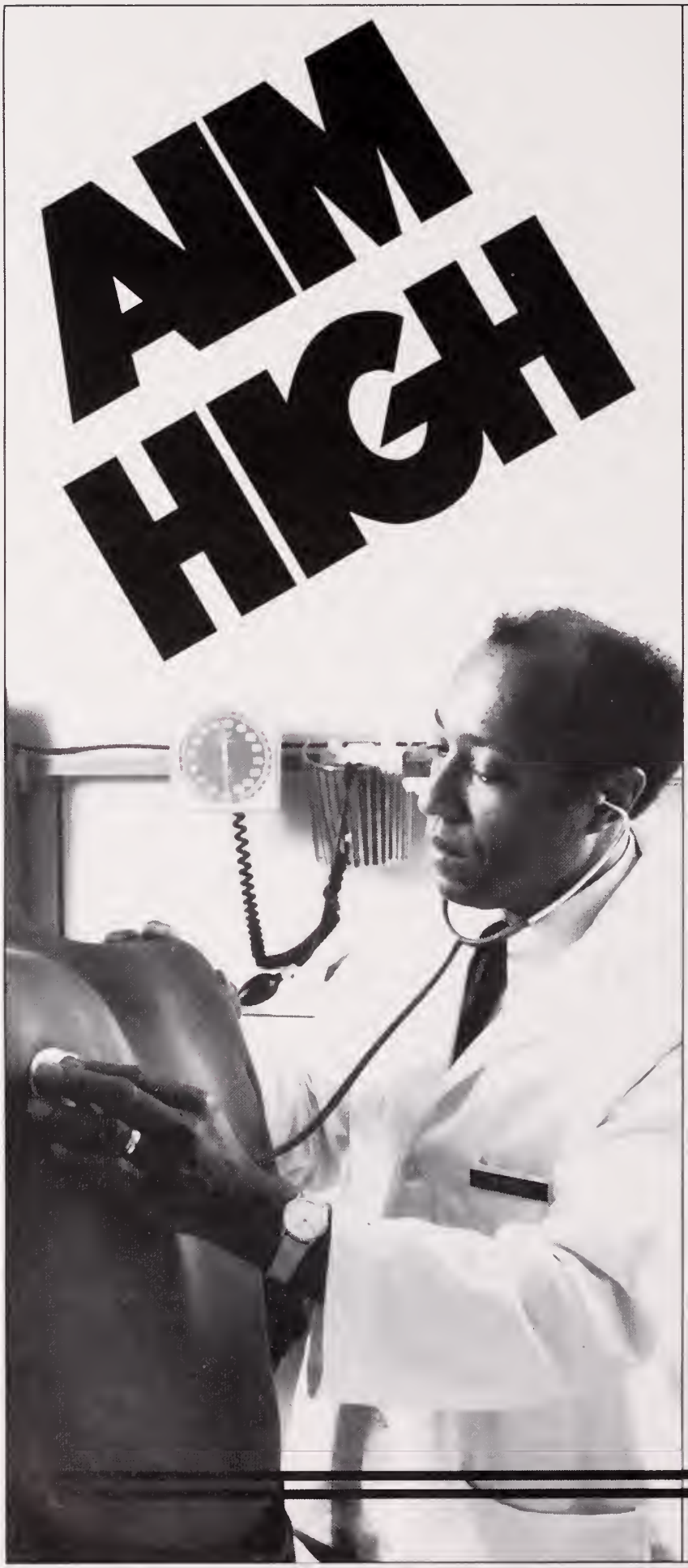

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The *Wisconsin Medical Journal* (ISSN 0043-6542) is the official publication of the State Medical Society of Wisconsin and is devoted to the interests of the medical profession and health care in Wisconsin. The communications director and managing editor are responsible for overseeing the production, business operation and contents of the Journal. The editorial board, chaired by the medical editor, solicits and peer reviews all scientific articles; it does not screen public health, socioeconomic or organizational articles. Although letters to the editor are reviewed by the medical editor, all signed expressions of opinion belong to the author(s) for which neither the *WMJ* nor the SMS take responsibility. The *WMJ* is indexed in Index Medicus, Hospital Literature Index and Cambridge Scientific Abstracts.

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Created by the Territorial Legislature in 1841 and now representing nearly 8,500 member physicians, the Society's purpose is to "advance the science and art of medicine and the health of the people of Wisconsin; ensure that physicians are equipped to deal effectively with the economic and political aspects of practice; and serve as the patient and physician advocate to government and other relevant publics." The major activities of the Society concern medical education, peer review, legislation, community health education, scientific affairs, socioeconomics, health planning, service to physicians, operation of the Charitable, Educational and Scientific Foundation, and publication of the *Wisconsin Medical Journal*.

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Our cover: For some, politics is an abstract concept that hovers only at the periphery of consciousness. But today, your practice is coming under ever-increasing political brush-strokes. Health care policy, regulations and law makers are stepping into your professional life in an unprecedented manner. How you view the canvas, as an abstract or well-defined concept, will help determine whether the future of politics in medicine is a positive one.

The cover design, by TypeTronics, Inc., captures the feeling that politics is an impressionist art, one without clear-cut borders and hard edges. A photo of the Wisconsin state capitol building was altered using digital image photo manipulation techniques.

Guest editorials by some of Wisconsin's legislators begin on page 9 and feature stories that highlight the SMS's involvement in public policy begin on page 17. Related articles are shown in the Table of Contents with the following symbol and can be found on WISMED, the SMS World Wide Web site, at **www.wismed.com.**

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President's Page

Challenge 1997

As I told many of you at the Inauguration in Green Bay last month, I am truly honored to be your President, to have the highest honor in Wisconsin state medicine bestowed on me. I have always thought a life in medicine a privilege in itself. But, to be so recognized by one's peers is truly an honor. And as I approach this year in office, I would like to lay forth my vision and my challenge to each of you around the state.

In short, I am going to challenge us all this year to focus on **communication** in three ways:

1. With the public.
2. Between physicians and their communities.
3. Use today's technology to enhance physician-to-physician and physician-to-patient communication.

Why? Because in this era of managed care, high technology and a distancing between physicians and patients, many of us have had to come to grips with the fact that in order to protect the sanctity of the physician-patient relationship and to keep up-to-date on research and developments, we need to change the way we do our jobs -- to keep in closer touch with our patients, our fellow physicians and the communities in which we live.

How do we do that? I propose several ways:

Sandra Osborn, MD, 1997-1998 SMS President, kicks off her year of leadership with a visit from the AMA's anti-smoking superhero, Extinguisher, at the opening of the 1997 House of Delegates.

- **Communicating with the Public**

A priority issue of the SMS this year -- restricting tobacco sales and marketing to minors -- is an issue we, as physicians of this state, can easily support to our publics. I started in Green Bay during the Annual Meeting, when the AMA's Extinguisher Superhero and I visited an Ashwaubenon elementary school and talked with over 100 boys and girls. As Doctor Nola Know, I talked to them about the importance of just saying "no" to tobacco.

The SMS will be looking for other opportunities to bring the Extinguisher to your community and the local media, to let you play Doctor Know, to bring the message of tobacco's harm to your children.

- **Communicating with our Communities**

This is a challenge I want to give to you this year: A challenge of heightening our efforts to give back to our communities.

It's the idea of tithing.

I'm an accidental tither, myself: My son Doug and his wife Darlene own a day-care center in Middleton. One day last year Doug called and said, "Mom, I've got a kid with a rash and a fever. I can't decide whether to call the parents now or wait till five thirty?" So, I

Continued on next page

Continued from preceding page

asked a few questions and gave him my best medical judgement. I helped my son and the child, the parents, and maybe even the child's physician. But even more, I helped my community. I contributed. And I realized that it's one of countless ways we physicians can contribute, can give back, can tithe.

Many of you serve as school team physicians, soccer coaches, volunteers at homeless shelters or meals on wheels, you read to nursing home residents, talk to PTAs, at Rotary and senior citizen meetings, serve on school and town boards, sing in church choirs, teach Sunday School, participate in community theater and the arts, volunteer to work for local political candidates, travel outside our borders to bring medical services to third world countries.

I could go on and on. The list of opportunities to make a difference, to make our communities better, is endless. What I am asking each of you, my colleagues -- the more than 8,500 physicians in Wisconsin -- to do this coming year is to be a physician tither. Pick a place where you can made a difference, make a contribution and do it.

The SMS staff can even help you with ideas: SMS can provide a public health issue listing of "100 Things You Can Do" and serve as a clearinghouse for disseminating informational resources.

- **High Tech/High Touch**

We are fortunate to be living in the age of technology -- an age when communication is a marvel.

The Genome Project, genetic engineering, molecular biology -- all will alter the way we diagnose and treat many diseases. Telemedicine, the Internet and the World Wide Web: these are dramatically changing the way information is delivered to doctors. The computer is here and we'd better log on.

It's happening not just in the big cities and major medical centers like Madison and Milwaukee but also in Hurley and Hayward and Menominee and Mount Hope. How I look forward to the day when I have my own terminal in my own office -- when my *WMJ* and my countless other medical journals, my PDR can all be reduced from reams of paper on my desk to CD Roms in my pocket, or electronic files on my computer. When, as happened recently, a newborn with a TSH of 251 needs my immediate attention, and I can punch that computer key to call up her mother's medical records, the State Lab of Hygiene's latest informational bulletin. In short, when I can do a better job -- be a better doctor.

We are in the midst of an explosion. An explosion of technology that will dramatically change the way we practice medicine.

And yet, I am puzzled by why some others don't have the same enthusiasms. Granted, it's understandable that some of our colleagues may be reluctant to enter the cyberworld, because they simply don't know where to start -- from knowing how to buy a computer, to finding the right service provider. I can relate. I was there only a year ago.

That's why the State Medical Society's goal, and my goal, is to help you master the training and technology you need to see the computer, not as a threat, but as merely another valuable tool. Just as a stethoscope now feels so comfortable around your neck, the SMS is here to make sure the keyboard is just as comfortable at your fingertips.

Already the Society has begun to use videoconferencing, expanded use of e-mail (such as for delivering *Medigram*), and launched a web site, WISMED. And what is on that web site? Around the clock, 365 days a year, at **www.wismed.com** you have: medical society membership benefits, highlights from the *WMJ*, the *Medigram*, news coverage of the latest health care issues, legislative updates, legal information, court rulings affecting Wisconsin physicians, trends in Wisconsin managed care, the SMS seminar and meetings calendars, insurance information, consumer-friendly patient information you can download and print out for your patients, reference resources such as physician chat rooms and direct links to other medical sites on the World Wide Web, links to state and federal legislative sites, direct e-mail links to SMS staff and state and federal legislators, and much more to come, including a members-only page.

All of these approaches are about communicating -- indeed connecting -- with each other, with our communities and with our patients. I ask each of you this year, and beyond, to join me in this effort. It's why we're here: "To achieve excellence and responsibility in quality patient care, by advancing the science and art of medicine."

Let's stay in touch. ❖

Letters to the Editor

At Risk Drivers: Are Physicians Required to Report?

INDIVIDUAL PHYSICIANS and the SMS often receive questions regarding the need or obligation to report persons considered at risk for highway safety to the Department of Transportation for driver testing or revocation of licensure to drive.

Section 146.82(3)(a) Wis. State allows physicians to report information relating to patients whose physical or mental condition, in the physician's judgement, affects the patient's ability to exercise reasonable and ordinary control of a motor vehicle to the Department of Transportation. The statute allows the physician to report the patient's name and other information relevant to the condition to the Department of Transportation *without the informed consent of the patient.*

The question of whether this law merely *allows* physicians or *requires* physicians to report has been raised often by some physicians and patients' family members alike.

The law states that physicians may report. When the Wisconsin Department of Transportation was requested to clarify this issue, they responded with the following statement:

> "There is an implied requirement in the Act 40 provisions that a physician is liable for not reporting if the physician exercising his or her good faith judgement believes that the person is at risk for driving."

I understand that there has been no case law of this issue at present. Therefore, we suggest that if a patient insists on driving against medical advice, that they may be reported if it is clear to the physician that the patient's condition affects his or her ability to exercise reasonable control over a motor vehicle.

To report a patient to the Department of Transportation, a narrative report on the condition of the patient, including applicable medical information, should be sent with the patient's full name and date of birth to: Bureau of Driver Licensuring, Department of Transportation, P.O. Box 7918, Madison, WI 53707-7918, (608) 266-2377. The physician may suggest any of the following to the DOT:

1) Submission of medical report by the patient;
2) Re-examination of the patient for licensure;
3) Immediate revocation of licensure.

--P. Hansotia, MD, Marshfield
Dr Hansotia is Chair, SMS Commission on Injury Prevention, Section on Transportation ❖

DRIVER CONDITION OR BEHAVIOR REPORT
MV3141 594

The following information is submitted for consideration as "Good Cause" for Departmental action as authorized under section 343.16 Wisconsin Statutes. Advanced age alone, cannot be considered as good cause. **Positive driver identification must be established.** License plate number only is not sufficient.

Submit To: Wisconsin Department of Transportation
Medical/Alcohol Review Section
P. O. Box 7918
Madison, WI 53707-7918

This information is subject to Wisconsin's Open Records Law.

Driver Name - First, Middle, Last	Birth Date	Driver License Number		State of Issuance
Address		City	State	Zip Code

Driver Condition - Check appropriate boxes. **Describe below.** Use back of form for additional comments.

- ☐ Physical Condition
- ☐ Mental/Emotional Condition
- ☐ Blackout, Seizure, Fainting Spell
- ☐ Confused/Disoriented
- ☐ Alcohol/Other Drugs
- ☐ Detective Vision

Driver Behavior - Check appropriate boxes. **Describe below.** Use back of form if needed.

- ☐ Traffic Violation(s)
- ☐ Dangerous Action (Accident prevented by another person)
- ☐ Lack of Driving Skill - Describe below
- ☐ Gross Lack of Attention
- ☐ Other - Describe below.
- ☐ Caused Traffic Accident
- ☐ Lack of Knowledge of Traffic Laws
- ☐ Obstructing Traffic

Describe in detail incidents or conditions which brought this driver to your attention. Give specific information such as dates, places, accident reports, all other available information to support need for re-examination.

Type of Enforcement Action Taken

Incident Location	Incident Date	Time	Person Hospitalized ☐ Yes ☐ No

☐ I observed incident. ☐ I investigated incident. ☐ Incident reported to me by person identified below

Title and Signature of Person Completing this Form X	Print Full Name	Area Code - Telephone Number
Address - Please Print	City - Please Print	Zip Code
Print Full Name of Person Who Can Verify the Above Information - Private Citizens or Family Members		Area Code - Telephone Number
Address	City	Zip Code

See reverse side for additional specs/instructions.

Time to Update Uniform Controlled Substances Act

I READ WITH INTEREST the article in the March 1997 *WMJ* by Kalisa Barratt, "The Right Prescription for Physicians," but I was somewhat lost when it came to understanding the prescribing of Schedule II sympathomimetic drugs.

These drugs apparently can be used for "treatment of hyperkinesis," but what in the world is "hyperkinesis?"

It is also unclear how these drugs might be used to treat "drug-induced brain dysfunction." Does this mean that patients in coma from drug overdose can be given stimulants, or does it mean that patients with permanent brain damage from drugs are appropriate candidates for stimulants?

The use of stimulants for "differential diagnostic psychiatric evaluation of depression" has been out of vogue for many years and has never been widely accepted by the psychiatric community.

Also, the use of stimulants to treat depression "shown to be refractory to other therapeutic modalities" makes good sense, but how does a clinician define "refractory to other therapeutic modalities?" For example, can a clinician be considered in violation of the Uniform Controlled Substances Act if the stimulant were prescribed to a depressed patient who had not previously failed to respond to electroconvulsive therapy?

Finally, while the overall use of stimulants is quite restricted in Wisconsin (this is not necessarily bad), they are approved for the very broad indication of "treatment of epilepsy." It would seem that greater specificity would be appropriate for their use in epilepsy.

It may be time to revise and update the Uniform Controlled Substances Act with regard to the prescription of amphetamines and similar Schedule II drugs.

--James W. Jefferson, MD, Distinguished Senior Scientist Dean Foundation, Clinical Professor of Psychiatry, UW Medical School, Madison

Author's Reply: The language used in the article is quoted verbatim from the Medical Examining Board's unprofessional conduct regulations for informational purposes and is not intended as the opinion of the author. ❖

Delayed Arrival of George Orwell's *1984*

GEORGE ORWELL'S over-riding concern for the future of individual liberties as expressed in his 1949 novel, *1984*, is extremely well founded.

With the passage of the Kennedy-Kassebaum bill, the physician can be prosecuted for committing a crime under Medicare rules without any intent to commit a crime being present. This means that a physician can violate one of the plethora of Medicare anti-fraud rules without knowledge, commit a crime without intent, and be successfully prosecuted by the government with their vast resources for the "crime."

The mailing of a statement to the patient with such a commission of an error in coding becomes a case of mail fraud. The potential penalty then becomes the number of statements that may have been mailed by the physician with this unintentional criminal error being present. Extrapolation by the government is utilized to come up with massive monetary fines and potential prison sentences for the physician. Even if the physician is innocent, his resources may be exhausted in his legal confrontation.

The Attorney General can subpoena any medical record looking for fraud without any reason. Fishing expeditions are now legal tools for Medicare in their effort to destroy individual liberties. Physicians should realize that patient privacy and excellence of care are only "bing" words and no longer are reality.

The plan that President Clinton put forth for saving $100 billion dollars in Medicare over a five year period relies on the usual price controls and reductions of payments on physicians and hospitals.

But President Clinton has proposed the transfer of the expensive home health program from Medicare Part A to Medicare Part B. Such a shift to Part B will accelerate the cost increase in Part B expenses. Since 75% of the funding for this portion of Medicare comes from general revenues, the taxpayers will not see it on their payroll stubs like the current Medicare Part A payments. This shift of the home health care program would further exacerbate the cash shortage in Medicare Part B and mandate the reduction in physician payments for services.

It is time for organized medicine to realize that the government is not playing this "game" fairly, and our leadership should become more familiar with playing "hardball."

All physicians should participate actively in organized medicine before the government devours the entire profession as a piece of cake in its insatiable appetite for control of this profession and their patients.

--J.S. Mayersak, MD
Wausau ❖

Guest Editorials

Patient Protection Act: The Right Thing for Patients and Physicians

Frank Urban, MD, (R) State Representative

Patient-Physician Relationship Turned Upside-down

When I was first elected to the Assembly in 1989, I was the first physician in almost 100 years to serve in the Legislature. My 19th century predecessor practiced a different kind of medicine than I did. If you had asked him to introduce legislation to repeal gag clauses or sponsor a patient protection act he probably would have wondered what on earth you were talking about.

It is truly unfortunate that as medical science has made tremendous advances, we have become horribly backwards when it comes to utilizing that science in delivering health care; becoming victims of our own success.

If you would have told me when I was in medical school that the day would come when doctors would be hard pressed to remain independent practitioners and would often be forced to defer to a board of non-medical personnel when deciding the best course of treatment for a patient, I would have said, "that will never happen."

But, here it is, 1997, and as we are on the dawn of a new century the medical community is in upheaval as practitioners battle administrators and patients are caught in the middle. Increasingly, for-profit forces are pushing physicians into the role of commercial agent to enhance the profitability of the health care organization.

In the process of doing this, the patient-physician relationship becomes distorted, being referred to as a provider-client, or consumer, relationship.

In response to this, I have been working with both the Milwaukee County and state medical societies on a comprehensive Patient Protection Act based on model legislation adopted by the American Medical Association (AMA). The bill is currently in the final stages of the drafting process, and it is anticipated that it will be introduced before the full Legislature in the near future. Already, the advance buzz on this bill indicates it will be a topic of great interest to most everyone in the health care delivery field.

Proposed Legislation

When we talk about a Patient Protection Act (PPA) we talk about a comprehensive, multi-pronged approach that is aimed at bringing back some balance to the patient-physician relationship. It will address the issues of access, quality and financial arrangements.

Under the Patient Protection Act, health care plans could apply for certification with the Commissioner of Insurance (OCI). In order to be certified, health plans would need to file essential information with OCI and must provide prospective patients with information on terms and conditions of the plan. This information must be in a standardized, readable and understandable format. This will enable consumers to compare various health care plans and choose the one best suited to their needs.

Representative Frank Urban, MD (R - Brookfield)

Health care plans would be required to disclose things such as: provisions of coverage, including any exclusions of services, any prior authorization requirements, co-pays or out-of-plan services that are to be the financial responsibility of the patient, and information on accessibility of specialists, emergency services, mental health services, drug formularies, and the coverage of experimental procedures.

Most importantly, in order to be certified, health care plans would be required to disclose if there are any financial arrangements or contractual provisions with the health care plan providers and any review organizations. This would include any "pay-for-performance" clauses, or any financial incentives or dis-incentives

Continued on next page

Dr Urban is a retired physician and is currently the State Representative for the 99th Assembly District. Legislative appointments include: vice chair of the Assembly Committee on Health and co-chair of Joint Survey on Tax Exemptions.

Continued from preceding page

to providers who limit care or have a high utilization of certain services.

While OCI certification will not be mandatory, plans that are certified will be carrying the equivalent to the *Good Housekeeping* Seal of Approval. Consumers will be able to feel confident that they will have access to important and necessary information about a certified plan before they choose a health care plan.

The PPA also encourages health plans to develop methods to provide for continuity of care for new plan enrollees whose physician is a not a participant in their new health plan.

This is an important option that new plan members should have in light of the fact that their new plan may not have physicians or facilities available in their immediate area.

This option should also be offered to current enrollees whose physician is dropped as a plan provider. Members who wish to see a provider outside the plan should have the option to purchase additional coverage that would allow them to continue to see a non-plan physician; the "point of service" option.

Physicians Benefit, too

Under the Patient Protection Act, there will also be fairness for physicians as they look to join a health plan. Even if they are already a member of a health plan, they will also benefit under the PPA. Health plans will be required to publish credentialing criteria including graduate medical education, hospital privileges and economic criteria. Physicians will also be made aware of the formal process used to review applications and a physician termination appeal process.

Health plans will be required to establish a Physician Advisory Committee which will provide a medical quality assurance mechanism and provide physicians with defined rights.

Under the PPA, gag clauses will be explicitly prohibited in Wisconsin. Although not all health benefit plans have jumped on this bandwagon, it is best to completely ban them before they become common practice.

Gag clauses are a grievous intrusion into the physician patient relationship and prevent full and open communication. It is the physician's obligation to disclose all treatment options to a patient, not just the ones approved by the plan. It is frightening to think of the consequences that may occur if gag clauses become widespread practice. There are always cases that defy conventional treatment and require a more specialized course of action. To prevent a physician from discussing those alternatives with a patient is unethical.

If a patient has a claim denied as not medically necessary, the PPA requires that the health plan must provide a written statement of reasons for the denial and explain to the patient their appeal rights. It is often frustrating to patients when a claim is denied and it is impossible to find out the reason why it was denied. And when a claim is denied, few patients know how to appeal that denial, and many are not aware if they even can appeal.

The person responsible for all clinical decisions in the plan must be a medical director who is a licensed physician in Wisconsin. Any physician-reviewers must also be licensed in Wisconsin and must not be compensated based on individual review decisions. Physician-reviewers who are reviewing final denial of a claim must be independent of the health plan and again, also be licensed in Wisconsin.

These requirements will apply not only to managed care organizations but also to indemnity plans. This legislation should not be looked upon as anti-HMO legislation but rather as pro-patient legislation.

This legislation does not in any way endorse the concept of "any willing provider." The insurance plan should be able to contract with whomever they please, but the patient must have full disclosure of their decisions.

The delivery of health care has changed radically in recent years. Status quo is always more comfortable, but this is not the real world. The challenges and opportunities of today must be accepted and developed to the benefit of the patient, not to their detriment. The PPA provides a step to make that a reality. ❖

Delivering Accessible, Quality Health Care to Women is High Priority for State Officials

Steve Foti, (R) Assembly Majority Leader

WISCONSIN HAS MADE great progress in delivering affordable health care to its residents. With over 2.6 million females in our state, the Wisconsin State Legislature recognizes that the unique health care needs of women need to be addressed. It is time to improve the way Wisconsin delivers health care to women. I believe Wisconsin will once again lead the nation with its comprehensive women's health initiative that will provide accessible services and quality health care statewide.

Until Governor Thompson's new Wisconsin Women's Health Campaign, as proposed in the 1997-1999 biennial budget, there has not been a comprehensive effort to deliver effective, cost-efficient health care services to women.

The Wisconsin Women's Health Campaign, headed by First Lady Sue Ann Thompson, seeks to improve the overall effectiveness and accessibility of health care for Wisconsin women. The Campaign will develop working partnerships between state and local health agencies, professional medical associations and volunteer organizations and coordinate available resources. The primary goal of the Campaign is to make women aware of chronic and serious health conditions that can potentially affect their lives and to inform them about ways to prevent these conditions.

The budget provides $2.3 million in 1997-98 and $1.4 million in 1998-99 for several components including health screening services, outreach and education programs and preventive care measures.

Screening Services

An essential part of this initiative will be the implementation of a broad spectrum of screening services. The health screening services will include a wide range of women's health risks, including cervical cancer, breast cancer, heart disease, diabetes, and high blood pressure.

The Wisconsin Women's Health Campaign...seeks to improve the overall effectiveness and accessibility of health care for Wisconsin women.

This will help determine what major health issues are facing women across the state and will be useful in tracking the overall effectiveness of the care and services provided to women.

It is important for us to reach the low-income, often under-insured, women of our state by identifying potential problems and providing preventive care measures.

Breast Cancer Awareness

Another goal of the Women's Health Initiative is to increase the proportion of women who receive mammograms. Additional state resources will be provided to purchase and operate additional mobile mammography vans. Similar programs, such as the Milwaukee Breast Cancer Awareness Project and Marshfield Clinic's portable mammogram service, have proven to be successful in reaching the population of women who need mammograms, but lack transportation or access to services.

Representative Steve Foti (R-Oconomowoc)

Through these efforts, the Women's Health Initiative will expand the current Wisconsin Women's Cancer Control program, which supports mobile mammography and breast cancer outreach services in the state. Services will be brought to women in underserved areas of the state.

To bring further attention to the issue, First Lady Sue Ann Thompson, a cancer survivor, will serve as the spokeswoman and actively stress the need for women to

Continued on next page

Rep. Foti, is from the 38th Assembly District in the Oconomowoc area. An Assembly member since 1982, Rep. Foti has served on numerous commerce and business committees. In 1993, he was appointed to the Legislature's Joint Committee on Finance, which reviews spending and taxing measures; in 1995, he was appointed Vice-Chair of the Finance Committee.

Continued from preceding page

receive an annual mammogram after age 40.

Domestic Abuse Intervention

In addition to health screening services and breast cancer awareness, the Wisconsin Women's Health Campaign will focus on domestic abuse intervention and prevention by increasing available shelter and support options in under-served areas.

Wisconsin has consistently recognized the importance of making women and children feel safe, however, there are still areas that can be improved. Eight new geographical areas in Wisconsin will be targeted to receive additional shelter and service sites for women.

Services provided by each site will include: crisis intervention; a 24-hour phone line; counseling and advocacy; referral and follow-up; and community education.

In addition, the award-winning Milwaukee Women's Center Community Awareness Program on Domestic Violence will be expanded statewide. Posters and radio and television ads will be used to send the message to domestic abuse victims that help is available.

Overall, the Wisconsin Women's Health Campaign takes the same approach used during welfare reform by reviewing "what works" and "what doesn't."

I firmly believe that this program will not only help deliver the most appropriate health care to women, but will also help in the long run by reducing health care costs and, most importantly, save lives. ❖

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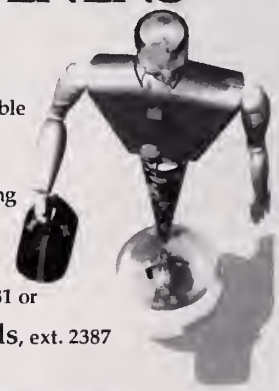

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Wisconsin's Long-term Health Care System Scheduled for Changes

Ben Brancel, (R) Assembly Speaker

The Need for an Overhaul

If Department of Health and Family Services (DHFS) Secretary Joe Leean and I have our way, the state's long-term health care delivery system will get a user-friendly top-to-bottom redesign in the near future.

This project, now in the planning stages at DHFS, is a huge effort. If you thought the recent overhaul of welfare was an enormous undertaking, wait until you see what's in store for long-term care.

What we have in mind is a fundamental shift in focus to a care system tailored to the needs of the individual patient -- a more easily accessed, more responsive system that will give a health-care consumer maximum flexibility. The goal is a system that is not limited by the boundaries of existing programs, but one that encourages collaboration and innovation in the delivery of long-term care.

Most important, we want the people of Wisconsin to have access to long-term care that allows them to be independent and to maintain their dignity, both essential components of a high quality of life.

There are now more than forty programs and funding sources designed to provide long-term care to the frail elderly, to those with chronic conditions, and to people with physical or developmental disabilities.

According to DHFS, long-term care is defined as "services needed to assist an individual to remain independent or to increase independence." This can include help required to perform daily activities, such as assistance in eating, bathing or dressing, and maintaining a house. It may also include medical care, managing illness symptoms or treatment of chronic conditions.

Today, when Grandma needs long-term health care assistance, she is presented with a bewildering array of options. First, she must complete a stack of forms, the purpose of which is to determine her financial or functional eligibility for a myriad of programs. Then, Grandma is told what programs she qualifies for; whether it is the care she genuinely needs is sometimes beside the point: Grandma gets the care she qualifies for, which could include COP, CIP, ICF-MRs, and PACE or ICARE, or any combination of state, federal or county assistance. If Grandma comes away confused, it's not her fault.

How to Make the Current System Better

- One-stop shopping
  The forms that must now be completed to access the alphabet soup of state and federal health-care programs will be combined into a "single point of entry." There will be one form to complete, and one person assigned to finding the care options that meet individual needs.

  This approach is designed to be more user-friendly and understandable.

Ben Brancel, Assembly Speaker (R - Portage)

- Care-managed system
  The services provided to an individual will be tailored to his or her specific care needs. Health-care providers or family members should not have to do battle with bureaucrats to get a patient the care best suited to individual needs.

  Under the new system, decisions will be made by the health-care consumer or the person who is most knowledgeable about the consumer's needs and personal preferences.

  Emphasis will be placed on creative use of private and public services, again making sure the care program fits the needs of the consumer.

- Dollars follow the person
  Allocating funding on a per person/per month basis will allow for maximum flexibility in delivery of services.

Continued on next page

Representative Ben Brancel, Republican from the 42nd District, has served on the Joint Finance Committee since 1990, and is the current Assembly Speaker. He co-chairs Joint Committees on Legislative Organization, Legislative Council and Employee Relations.

Continued from preceding page

- Performance-based contracting
  According to DHFS, providers will have responsibility for positive client outcomes.

- Integrated funding stream
  In the interest of administrative efficiency, all state and federal funding sources would be combined, which will also improve consumer accessibility. Eventually, funding for acute and primary care received by long-term patients will be included in the consolidation as well.

Changing Population Requires Changing System

That is the general focus of the long-term care redesign. Streamlining, accessibility, and flexibility are what we're after.

Changing demographics have placed increased demand on the state's long-term health care system, and as Wisconsin's population continues to age, that pressure will increase. I believe it is vitally important that we plan for the future by making necessary changes now, instead of waiting until we are forced to play catch-up.

Staff at DHFS are hard at work on the details of this effort, making sure the end product meets the high standards Wisconsin health-care consumers have come to expect.

In the end, I expect that Wisconsin's long-term health care delivery system will be a model for other states. ❖

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Campaign Finance Reform

Lynn Adelman, State Senator

Why Campaign Finance Reform is Needed

The 1996 elections saw some of the worst violations of campaign laws since the Watergate scandal 25 years ago. At the national level, allegations persist that senior White House officials were heavily involved in raising campaign contributions, often from questionable sources, and that these donations influenced administration policy.

Despite our state's image for clean government, Wisconsin also experienced unprecedented campaign spending last year. In addition, a number of special interest groups violated state law by trying to influence the outcome of elections without abiding by state registration and disclosure laws.

These developments have made the need for campaign finance reform more urgent than ever, although the obstacles to the passage of meaningful reform by the state legislature remain daunting. Each house of the legislature has signaled the importance of campaign finance reform by creating standing committees on the subject, making Wisconsin one of the only states in the country to do so. As the Chair of the Senate Committee on Judiciary, Campaign Finance Reform, and Consumer Affairs, I authored Senate Bill 7, a comprehensive piece of legislation aimed at making some necessary reforms in our state's campaign finance laws.

I believe that the key to meaningful campaign finance reform is to limit the amount of spending in state races. The legislation I am working on revises current spending limits and makes them more realistic.

The only way for these spending limits to have any force is for candidates to participate in the public financing system. In fact, the state election law should be so strong that the only logical choice would be for a candidate to accept public funding. I attempt to deal with this situation by setting the amount of the public grant at half the candidate's spending limit and creating a "double bubble."

By this I mean that if a candidate opts out of public funding, the opponent would receive the candidate's grant in addition to having the spending limit raised.

Necessary Steps

In order for the public funding part of my bill to work, public money needs to be available. SB 7 raises the check-off on the state income tax form to $3. While this step is necessary, it will not ensure the availability of enough public money to make the spending limits work.

In addition to the increased check-off, the Legislature will need to make a sum-sufficient appropriation from general purpose revenues to ensure that all qualifying candidates receive full grants.

Senator Lynn Adelman
(D - 28th Senate District)

The Elections Board needs to be de-politicized so that it has a nonpartisan character. My bill restructures the Board so that political appointees do not make decisions about regulating the political parties in the election process. Instead, I am proposing a structure similar to that of the Ethics Board, which requires members to be free of partisan associations and overt political entanglements.

I view my bill as a starting point for further discussions, and I am hopeful that Democrats and Republicans alike will be able to support many of these provisions. ❖

State Senator Lynn Adelman, of Mukwonago, is serving his 11th session in the Senate. Senator Adelman is the Chair of the Senate Committee on Judiciary, Campaign Finance Reform and Consumer Affairs. He represents the 28th Senate District which includes parts of Milwaukee, Racine, Walworth and Waukesha counties.

Time to Get Wisconsin's House in Order

Wally Kunicki, RN, (D) State Assembly Democratic Leader

FOLLOWING THE RELEASE of the Governor's proposed two-year spending plan for Wisconsin, a reporter asked for my opinion.

I said at the time that this budget is a campaign document, not a blueprint for Wisconsin to step into the 21st century.

We're talking about the fiscal health of the state, and in my opinion, this budget pushes the state to the edge of fiscal prudence.

Governor's Budget

Notwithstanding the onerous multi-million dollar fee and tax increases -- targeted at day care centers and coin-operated laundries affecting our hardest working, most vulnerable constituents -- the Governor and his legislative allies seem to have agreed not to disagree about balancing the books.

High on the list of questionable tactics is the Governor's plan to push spending $100 million in school levy tax credits onto a future budget.

In other words, we're spending today and paying for it, well...whenever, which begs the question: What has happened to Wisconsin's pay-as-you-go tradition? Ominously, this fiscal brinkmanship is catching up with us.

The Governor's politically-popular proposal to do away with parole would boost an already spiraling inmate population and superheat Wisconsin's fastest growing industry: prison construction.

Then there's the governor's laudable but hastily-conceived half-billion dollar proposal to wire schools for high technology. The Governor demonstrated the breathtaking reach of this technology during his State of the State speech, speaking from Madison with students in a Washburn classroom.

As it turns out, the Washburn school Thompson featured wouldn't get the state aid he's proposing.

More serious is the growing inequity in school funding, which accounts for unwieldy classroom sizes, the lesser quality and availability of classroom books, and a host of other issues, which has moved more than 100 school districts in Wisconsin to file suit challenging the constitutionality of the state's school funding formula.

On the health care front, the most contentious issues are expected to be a proposed ban on late-term abortions and the cigarette tax.

There's an issue the Governor hasn't talked enough about: transportation. Every day there's new evidence of a steadily decaying transportation hub in Milwaukee, neglected and delayed road projects in the outlying parts of the state, and a 15-year backlog of road construction projects on the state's drawing boards.

Meanwhile, as we dither over the budget other contentious issues gather dust. They include the future of the stalled lottery credit, campaign finance reform, the steadily rising cost of welfare reform and shielding taxpayers from possible cost overruns in the construction and operation of the new Brewers stadium.

Representative Wally Kunicki (D-Milwaukee)

On the health care front, the most contentious issues are expected to be a proposed ban on late-term abortions and the cigarette tax. The abortion bill has encountered problems even among the most vocal anti-abortion groups who are pushing for an elimination of an exception in cases in which a woman's life is in danger.

State taxes on cigarettes will likely increase, the only debate seems to be by how much. Proposals on the floor range from a 5-cent-a-pack increase, favored by the governor, to a 56-cent hike favored by some legislators.

Wisconsin is on the doorstep of the 21st century. My hope is that we will step boldly into this new era and not be hamstrung by fiscal liabilities that will catch us up in a revolving door of excuses and finger pointing. Purposely not dealing with these issues won't make them go away. It's time to get Wisconsin's house in order. ❖

Democratic Representative Kunicki represents Assembly District 8, on Milwaukee's near South Side. He is currently Assembly Minority Leader and previously served two terms as Assembly Speaker.

Politics and Health Care

Judith D. Burke, managing editor

With the introduction of the Governor's 1997 budget, politics and health care are again intermingled and on the front burner. This month, the *WMJ* focuses on the ways in which politics and legislation intermingle with health care delivery.

Politics. As a physician, you brush up against the residue of politics every day in your practice. You experience the decisions made by politicians, most of whom have no health care training, every time you treat a patient.

How can politicians know the best means of advocating for the patient? How can they know the best means of protecting the physician-patient relationship? They cannot. And as you'll find in reading their own comments in this issue of the *WMJ*, they rely on you to explain the finer points of health care delivery in order to make the best possible decisions.

Sometimes the decisions favor physician practices and sometimes they don't. The struggle to find balance between what's best for the public constituency and what's best for the physician constituency seems never ending.

If you listen to the news, read the papers or hunt around on the Internet, you are likely to find a barrage of health care related issues currently being discussed in the political arenas. A few of the topics being reviewed by the National Center for Policy Analysis include*:

- Cost issues of health care, including: rising costs; uncompensated hospital care; increase costs for employers; cost shifting; medical expenses for the terminally ill; organ transplants and other expensive procedures; unnecessary medical care; and administrative costs.
- Tax issues, such as tax subsidies; tax reform and how it will be paid for; and medical savings accounts.
- The uninsured, who they are and how to cover them; Medicaid's rising costs; uninsured children; and risk pools.
- Universal coverage -- is it possible? Is it necessary to control costs?
- Medical ethics: is the Hippocratic oath under the fire of cost benefit analysis? Medical ethics and managed care (are they compatible?); rationing; treatment of terminally ill patients; and organ markets for transplant recipients.
- Pharmaceutical and the need for effective price controls; making drugs safe and available; FDA gag rules.
- Long-term care
- Rural health care
- Tort system
- Alternative medicine
- Minority issues
- Medical education and medical research

For this month's look at politics and medicine here at home, the *WMJ* asked a few of Wisconsin's elected officials to provide their points of view on the role politics plays in health care. These Guest Editorials begin on **page 9**.

We also wanted to provide an in-depth look at how the SMS represents you to politicians. Starting with a recap of our 1997 Legislative Day event on **page 18**, followed by presentation remarks by State Representative Mark Green (**see page 20**), State Senator Chuck Chvala (**see page 22**) and State Representative Sheldon Wasserman, MD, (**see page 25**) we also bring you a look at how SMS policy is determined (**see page 26**).

To help you understand the many ways you can be actively involved in political issues that affect medicine, we provide an overview of the SMS's political action committee, WISPAC (**see page 28**).

And, to highlight what the SMS can do for you with regard to policy positions, look for our story about who the SMS policy analysts are and what they do (**see page 30**) for you and your staff.

Also, because politics results in laws that impact decisions you make with your patients, be sure to read about domestic abuse reporting and documentation issues including a special contribution from Susan Kinast-Porter, MD, representing the SMS Domestic Violence Subcommittee, on **page 63**.

It's likely that when you consider Wisconsin politics you think about campaigns and candidates, and activities going on at the Capitol that may seem very far removed from your day-to-day life. We hope this issue of the *WMJ* highlights the ways in which politics, whether you want it to or not, touches your practice and the treatment you provide your patients. And, we hope to identify the actions you can take to make sure that the picture politics paints in your life is a positive one.❖

*from the NCPA world wide web site: www.public-policy.org/~ncpa/

1997 Legislative Day

Judith D. Burke, managing editor

Remember taking field trips in elementary and middle school? The excitement you experienced over having a day out of school; the opportunity to explore museums or see a play? Well, the SMS Public Affairs department provided just such an opportunity for physicians in March. Physicians from around the state had the chance to meet one-on-one with their own legislators and to really get inside the Wisconsin political system.

Legislative Day began in 1993, the result of a House of Delegates resolution. The goal is to provide a way for the SMS to inform state officials about the needs facing organized medicine. By bringing physicians, as a group, into their representatives' offices, armed with important health care policy initiatives that physicians would like the state to undertake, legislators have an opportunity to see that organized medicine is alive and well. Their constituent physicians represent an influential socio-economic population that has considerable political muscle to flex. "It is vitally important for legislators to understand the role physicians play in the health care delivery system," says SMS VP, Public Affairs, Mike Kirby.

Legislative Day also helps physicians gain a better understanding of how state government works, what items are on the political agenda, and the ways in which the legislators rely on physician involvement.

It's an ideal way to bring two interested parties together for a day of education and exploration of the possibilities for action.

March 12, 1997

The SMS-sponsored Legislative Day takes place every other year. This year, with over 100 physicians and a contingent of medical students from the Medical College of Wisconsin on hand, the day started off with guest speakers, an on-going WISMED (the SMS world wide web site) demonstration that links physicians from Wisconsin to physicians around the United States and the world, and a luncheon prior to the legislator visits at the capitol. Each speaker fielded questions from the audience and lively discussion regarding serious issues facing health care today, on topics from violence as a public health issue to clarification on the Kennedy-Kassebaum bill, ensued.

If there was one overriding theme for the day, it was that physicians' involvement in the political process does make a difference in the outcome of health care-related legislation. Repeatedly, the speakers emphasized that politicians are inundated by information, and are just too busy to educate themselves about every detail in every piece of legislation that comes before them.

They described the ways in which they look to organized medicine to offer clarification of the facts and the ways in which physicians' interests may be overlooked if their individual and collective voices are not heard.

Guests of Honor

In addition to State Senator Chuck Chvala and State Representatives Mark Green and Sheldon Wasserman, MD, whose Legislative Day remarks immediately follow this article, the day's agenda featured comments by Sandra Osborn, MD, 1997-98 SMS President, who kicked off the meeting and urged physicians to become more active in state politics.

Mike Kirby provided an update of federal health care legislation facing the US Congress.

Chief Justice of the Wisconsin Supreme Court Shirley Abrahamson offered a fascinating look

Photo courtesy of Frank Bilek

Senator Peggy Rosenzweig (R-5th District) meets with students from the Medical College of Wisconsin.

at American government as she discussed the ways in which judges can be influenced: they can't. But they are elected and the polling booth is where physicians have the power to ensure that those who support health care initiatives will be sitting on the bench.

Joe Leean, Secretary, Department of Health and Family Services, discussed the current proposals coming from his office to expand long-term care to residents of Wisconsin.

And with a lighter spin on the political process, Roger Putnam, WISC-TV Channel 3 reporter, offered the media's view on the political agendas likely to be played out in 1997.

"We worked hard to provide a cross-section of state leadership who are involved and interested in achieving the best possible health care policies," said Kathy Andersen SMS Associate Director, Government Affairs.

If you didn't have a chance to attend 1997 Legislative Day, we urge you to schedule it when next offered in 1999. "It is an effective and invaluable tool for reaching legislators, showing the strength of organized medicine in the political process," says Kirby.

If you'd like to find out who your representatives are, or want information on legislation that is pending and how you can play an active role in the decisions to be made affecting health care delivery in Wisconsin, please contact **Mike Kirby at the SMS, (800) 362-9080 ext. 260 or via e-mail at: MIKEK@smswi.org, or Kathy Andersen at SMS ext. 262 or via e-mail at: KATHYA@smswi.org.**❖

Photo courtesy of Frank Bilek

Wisconsin State Supreme Court Chief Justice Shirley Abrahamson speaks about the American judicial system.

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The Future of Health Care Legislation

Mark Green, State Representative, Assembly Majority Caucus Chair

Historical Importance of Recent Past and Future

When I ran for the Assembly two years ago, I argued that the following three or four years would likely be the most important ones in modern Wisconsin history. Two years later, I think those words have proven true. In the last two years the Legislature has:

- Passed a budget boasting the largest tax cut in state history;
- Made Wisconsin the first state to enact a law that ends traditional welfare programs;
- Replaced, not merely reformed or fine-tuned, but replaced an outdated juvenile code;
- Passed the most sweeping litigation reform in a generation;
- Made medical liability reform one of the most highly-charged debates during the recent years.

I want to compliment the State Medical Society -- Kathy Andersen and Mike Kirby in particular -- for working so hard on behalf of health care providers in this debate. I also want to compliment colleagues on both sides of the aisle who stood firm for medical liability reform despite inflammatory, often irresponsible, rhetoric from the other side.

In the end, reformers won for very practical reasons. At the end of the day, legislators *are* concerned about the health and safety of patients and victims -- and they believe the best way to express that concern is to keep the most qualified health care practitioners in their fields and to keep health care as accessible and affordable as possible.

In my four-year scenario, I would argue that the next two years may be the most important couple of years in modern history. During the next two years, the Legislature will undertake continued property tax relief, choose a path for this state in utility restructuring, and watch the negotiation and possible extension of all gaming contracts.

We are rapidly approaching a crossroads on the subject of health care reform.

I would argue that other issues like health care reform will be just as important during these historic times. We are rapidly approaching a crossroads on the subject of health care reform where we can choose either to strike out ahead on the path of innovative, private-sector oriented, practitioner-centered reform, or else we can permit the forces of big government bureaucracies to thrust their own answers upon us. (With the consent and perhaps even the urging of the public).

Photo courtesy of Frank Bilek

State Representative Mark Green addresses the Legislative Day gathering of physicians.

Recognizing the Significance of Health Care Reform

Assembly Republicans have tried to build support for a health care reform agenda that will help the state blaze a trail that follows the sweeping market reforms of last session. These reforms include the following:

Raising the Patients Compensation Fund Malpractice Threshold

I have authored, at the request of the State Medical Society, a bill that would move the threshold from $400,000 per occurrence and $1,000,000 in the aggregate to $1,000,000 per occurrence and $3,000,000 in the aggregate each and every year.

This should result in generally lower Patients Compensation Fund rights and return the Patients Compensation Fund's original purpose of covering new claims.

Senior Care Plan

Assembly Republicans are pushing for the creation of a seamless sys-

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State Representative Mark Green, of Green Bay, has represented the 4th Assembly District since 1992. He was elected to the post of Majority Caucus Chair in 1994 and 1996. Green also chairs the Assembly Committee on Judiciary and Wisconsin's delegation to the American Legislative Exchange Council.

tem of coordination and delivery of health care for the state's many different nursing homes and institutional long-term care programs. This is being done in coordination with Department of Health and Family Services Secretary Joe Leean. It will hopefully lead to one-stop shopping within regions where people can obtain information and referrals for needs in this area.

Health Care Tax Relief

Led by legislator Frank Urban, MD, Republicans are introducing a plan that would allow income taxpayers to deduct 100% of the cost of long-term care premiums. This rewards people who plan ahead for their future and it gives the people the tools to be self-sufficient. We believe that self-sufficiency is a better answer than the creation of another bureaucratic program.

Curbing Teen Smoking

Last session's failure to pass a good teen smoking bill was an institutional failure. As a result, a new plan is moving forward which will discourage teen smoking by requiring young people to provide proof of age when making purchases and which will eliminate free cigarette give-aways and ban vending machines where minors are allowed admittance. We must all remember that teen smoking is already illegal -- the battle is to keep cigarettes out of minors' hands.

Medicaid Smart Cards

Republicans want to use state-of-the-art smart card technology for the administration of Medicaid. Resulting reductions in paperwork, errors and fraud should save taxpayers over $2,000,000 per year.

Wisconsin Health Information System

Republicans want to create a standardized method by which providers and insurers provide specific, understandable information to consumers regarding the extent and cost of specific coverages and procedures. We hope this will empower patients so they can be informed consumers in the health marketplace.

Why Physicians Must be Involved

There is danger in allowing health care policies to be established primarily by legislators. I serve in an institution which too many of my colleagues can tell you exactly when the end of the world is -- it's the first Tuesday in November, 1998. When faced with balancing long-term decisions against short term, sometimes perfectly-motivated decisions, short-term decisions too often win out because of the "end of the world" mentality.

Therefore, physicians and others concerned with health care policy must stay involved in the battle for good public policy. Physicians should never be deterred in their battle to represent their patients in particular, and good public policy in general. ❖

Health Care Coverage Reform: A Democratic Approach

Chuck Chvala, Senate Majority Leader

At a time when men and women all over the state -- and all over the country, for that matter -- suffer from a sense of instability in the workplace, health care has become a critical issue. Legislators have a responsibility to make health care reform a top priority, with affordability, accessibility, and universal coverage for our children as our primary goals. A Democratic agenda has been developed to help us meet those three goals for the working families of Wisconsin.

Health care reform is not a new issue. There have been steps taken and legislation proposed for years, but we still face escalating costs and threats to our children's health security.

Health Insurance Market Reform
Under the terms of the Kennedy-Kassebaum bill passed at the national level last year, states can avoid certain federal requirements if they demonstrate that they are implementing an alternative health coverage mechanism that meets certain standards.

Those standards are:

1) that all eligible individuals are provided a choice of health insurance coverage;

2) that such coverage does not impose any preexisting condition exclusions; and

3) that the choice of coverage includes at least one policy form of coverage that is comparable to comprehensive health insurance coverage offered in the individual market or a standard option of coverage available under the group or individual health insurance laws of the state.

Two options have emerged in Wisconsin to meet the provisions of Kennedy-Kassebaum.

The first option is from Governor Tommy Thompson, who has advocated an expansion of the HIRSP program in Wisconsin. Currently under the HIRSP program, which is funded by a combination of state contributions and insurance company assessments, doctors receive 90% payment for their work with HIRSP patients.

The Governor wants to reduce costs by requiring doctors to take reduced payments for the program. To that end, he has proposed that the payment level to doctors be reduced from the current 90% level to 65%, a dramatic reduction in physician compensation.

I disagree with the Governor on that point. In fact, I am absolutely committed to raising the reimbursement level significantly from the Governor's proposed 65% level.

However, Senate Democrats are offering another alternative to meet the standards of the Kennedy-Kassebaum bill. Developed in conjunction with Wisconsin Independent Businesses, Inc. (WIB), the Democratic proposal would help address the difficulties faced by working families -- farm families and small businesses, specifically -- in terms of health care coverage. Under the Democratic proposal, small businesses would have access to more affordable health care coverage plans for their employees.

Photo courtesy of Frank Bilek

Senator Chuck Chvala presents the 1997 democratic agenda to the Legislative Day audience.

The theory driving the proposal is containment of health insurance costs through the use of large regional insurance purchasing pools, improving both access and quality in the process. It would reform and improve access by providing universal access to the insurance plans provided through the program; and it would reform and improve insurance quality by developing standardized plans that offer comprehensive coverage.

Children's Health Care Reform
Although market reform is important, our number one priority in terms of health care reform has to be our kids. Across the United

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Chuck Chvala of Madison was selected Senate Democratic Leader in October, 1995, and became Majority Leader in June, 1996. He has served for ten years on the Joint Finance Committee. Among the legislation he has sponsored over the years, Senator Chvala authored legislation that created the power of attorney for health care decisions and important legislation to control runoff water pollution.

States in 1995, ten million children were without health insurance. Of those ten million, 80% lived in homes with parents who worked.

In Wisconsin alone, more than 90,000 children do not have even the most basic health insurance coverage. Until we can -- at the very least -- make sure that 100% of Wisconsin's children have health care coverage, we cannot consider our attempts at health care reform successful.

For that reason, Senate Democrats have proposed a three-step plan to cover those 90,000 children-bringing us to the 100% mark-by the year 2000. The Democratic plan would expand the federal-state Healthy Start program; implement a Healthy Kids program similar to a Florida model; and, consistent with the federal Families First agenda, require that any state or federally supported health care insurer offer a kids-only policy for children thirteen years old or younger. A Legislative Council study would then be initiated to determine ways to cover any children who still remain uninsured.

Healthy Start

The first element of the program would be the expansion of Healthy Start. Currently, states are required to provide medical assistance coverage for specified groups of low income pregnant women, as well as children who would not otherwise qualify under AFDC-related eligibility criteria. At their option, states may also cover additional groups of low-income pregnant women and children. The medical assistance coverage of mandatory and optional groups of non-AFDC pregnant women and children in this state is known as Wisconsin's Healthy Start Program. Two income levels are used for eligibility: a) pregnant women and children up to age six in families with incomes up to 185% of the federal poverty level (FPL); and b) children age six and older born after September 30, 1983, in families with incomes up to 100% of the FPL. (Eventually, this category will expand to include all children up to age 19 at 100% of the FPL.)

Currently, Wisconsin spends approximately $75 million on our Healthy Start program.

Expansion of the Wisconsin Healthy Start Program would involve raising the income standards of eligibility. The Legislature is now studying the impact of raising the income standard for the (a) group from 185% of the FPL to 225% of the FPL and raising the standard for the (b) group from 100% of the FPL to 225% of the FPL.

Depending on the fiscal impact, these increases would be possible both under the state and federal laws for medical assistance coverage, as well as under the federal welfare reform act. In addition, the President has proposed making $750 million annually available to states to develop innovative programs to provide coverage for children. These funds can be used to reduce our costs in Wisconsin.

In Wisconsin alone, more than 90,000 children do not have even the most basic health insurance coverage. Until we can... make sure that 100% of Wisconsin's children have health care coverage, we cannot consider our attempts at health care reform successful.

Healthy Kids

The second element of the Democratic kids health care coverage plan involves the creation of a Wisconsin Healthy Kids program, based on a Florida model. The Healthy Kids program emphasizes preventative care, with the assumption that increased access to health care services improves a child's health and reduces the incidence and costs of childhood illness and disabilities.

The Florida program is funded by the state, families, school districts, hospital authorities, children's service councils, and community groups. Looking ahead to the development of a similar Wisconsin program, grants -- like the Robert Wood Johnson Foundation grant -- are available to help with planning and implementation costs.

As under the Florida model, there would be three primary requirements to determine program eligibility. The program requirements are as follows:

- participants must either be children between the ages of five (5) and nineteen (19) who are enrolled full-time in kindergarten through twelfth grade public school programs OR pre-school age children whose siblings meet those qualifications;
- participants must have no comparable health coverage at the time of enrollment into the Healthy Kids program OR have proof of involuntary termination of comparable coverage; and
- subsidy eligibility must be based on the same scale as the National School Lunch program.

Kids-Only Policies

"Kids-only" insurance policies are an integral part of the Gephart/Daschle federal initiative to make health coverage of children more available and affordable for working families. Under this portion of our kids health care plan,

Continued on next page

Continued from preceding page

this initiative would involve three components.

First, the state would mandate that all insurance companies and managed care providers that do business with the government (SEHBP, Medicaid, etc.) offer kids-only policies for children up to the age of thirteen (13). We would require that these policies provide coverage and benefits equal to or better than those offered in their standard packages.

In addition, the state would mandate that these kids-only policies include various consumer protection clauses outlined under the federal Kennedy-Kassebaum bill, including-but not limited to-guaranteed issue, renewability, and prohibitions against discrimination based on health status.

Finally, assistance would be offered to working families in order to cover a small portion of the cost of the premium in the form of tax relief and premium subsidies.

Health Care is not a Partisan Issue

Health care reform remains one of our most important issues, both at the state and national levels. Though progress has been made on a number of fronts, there is still much work to be done. In two critical areas, Wisconsin Senate Democrats have proposals that can help us reform our system: in offering more accessibility to small employers and in covering 100% of Wisconsin's children.

In this important issue, there is no room for partisanship. Health care reform must be more than a campaign promise that is dusted off in the heat of an election season and then shelved again when it comes time to get the real work done. Wisconsin's working men and women -- and their families -- deserve the security of health care coverage...as well as the unified effort of their elected officials to help them get it at an affordable price.❖

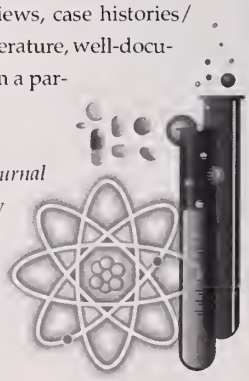
Call for Papers, Reviews, Commentary....

The Editorial Board of the *Wisconsin Medical Journal* is currently seeking original articles for Summer and Fall 1997 issues addressing topics related to:

- ***Rural Medicine***
- ***Women in Medicine***
- ***Genetics***
- ***Care Pathways***
- ***Managed Care***
- ***Rehabilitation***
- ***Tobacco***

Papers may be original research, literature or book reviews, case histories/reports accompanied by a brief overview of the relevant literature, well-documented opinions about future trends, or your thoughts on a particular topic in the form of a Guest Editorial.

All submissions should conform to *Wisconsin Medical Journal* requirements. For further information or to obtain a copy of the instructions to authors, contact Judith D. Burke, managing editor, SMS, P.O. Box 1109, Madison, WI 53701-1109, (608) 257-6781 or toll-free at 1-800-362-9080, fax (608) 283-5401, or via e-mail at: JUDITHB@smswi.org.



Get Involved -- You can Make a Difference Between Good Health Care Legislation and Bad

Sheldon Wasserman, MD, (D) State Representative

I THOUGHT I WOULD TALK with you today about the importance of your involvement in the political process. As a physician and legislator, I can tell you with certainty that your involvement matters. Your participation in the legislative process is crucial, and it does make a difference.

As physicians and concerned citizens, there is much you can do to become involved in the political process. Much you can do to make certain that our collective voice is heard, and that the best possible legislation that protects both our patients and the physician-patient relationship, will be enacted. You may wonder what you can do to make a difference. I'm here to tell you, lots!

Legislators rely on several things in order to get their legislation passed. The first, is getting elected. You can play a tremendous role in that process. I urge you to find out who the candidates are in your local and state races, and get out and meet them. Look to the candidates who support the health care initiatives you support. One of the very first steps to take is to join WISPAC, the SMS's political action committee, if you haven't done so already (see related article on page 28); WISPAC represents a unified voice of physicians concerned with today's health care legislation. Go a step further, if you're so inclined, and work on a candidate's campaign. You can donate money and time to campaigns, all donations are greatly appreciated, and all donations have a lasting affect.

If you have the time, help out with a campaign by distributing leaflets, making calls, going door-to-door with the candidate in your neighborhood, or hosting a fundraiser to help support the candidate.

Once elected, the candidate-turned-legislator will remember your help. And when important health care legislation is being heard, that legislator will remember your interest in the campaign. He or she will happily listen to your concerns when you call to express your opinion or support for particular legislation. And you may become someone that the legislator turns to for information regarding certain medical issues.

You know, we like to think that, as legislators, we know a great deal about a great many topics, but the truth is, we can't be experts on everything. We can't know all the details of the hundreds of bills that come before us every year. Consequently, we rely on physicians like you to help us collect vital information that enables us to make educated decisions.

If you don't get involved, the legislators, most of whom are not physicians, are not medical experts, will be making important health care decisions without your input. Decisions that can affect your practice and the ways in which you deal with your patients.

I stand before you today as a physician and legislator, one who knows how the system works. And though some of you may scoff at the notion that those who volunteer on a campaign or who donate to a campaign are the people whose voices are heard the loudest, that is the truth. That is the way the "game" of politics is played. If you know that, you must participate. You must not let the urgent decisions facing the house of medicine today be left to non-physician legislators.

The SMS has brochures available that list all of your legislators by district, and the information is available on the SMS World Wide Web site, WISMED, as well (www.wismed.com). They also sponsor the Key Contact program that can help put you in touch with your legislator when important issues are on the table (**see page 28** for more information). Use their resources, and please, get involved today.❖

Sheldon Wasserman, MD (D - Milwaukee)

Sheldon Wasserman, MD, is serving his second term in the State Assembly. He currently serves on the following Assembly committees: Health, Income Tax Review and Insurance, Securities and Corporate Policy. Dr Wasserman and his family reside in Milwaukee.

SMS Policy-Making: Working to Make Government Work for You

Judith D. Burke, managing editor

WHETHER YOU REALIZE it or not, one of the key reasons you belong to the SMS probably has to do with policy making and the resultant legislation that comes forth. As an organization, the SMS regularly develops policy stances on all facets of medical procedures and health care delivery.

These policies are delivered to your legislators in many ways, including proposed legislation, testimony on existing legislation and statements to the media. SMS policies provide the roar of your collective voice as physicians in the state of Wisconsin; they provide the means by which legislators become educated about health care delivery; they provide a uniform base from which to work to constantly protect the patient-physician relationship.

How Policies are Formed

Every year, the SMS publishes its Policy Compendium, a booklet that outlines every issue about which the SMS has developed a stand. The development of policies is a complex, labor-intensive process with no definitive formula. It all starts though, with you.

Generally, as Mike Kirby, SMS VP, Public Affairs, states, "a discussion will arise in either a commission or Board meeting, or a topic is brought forth in the form of a resolution before the House of Delegates."

A recent, seemingly simple issue that was brought forward by the Commission on Injury Prevention and Control concerned bike helmets for children. The commission wanted the SMS to support a proposed requirement that all minors wear bike helmets.

Before the commission reported its position and request to the Board, a lot of background work had already taken place. The policy analyst that staffs that commission had to find out if any policy already existed that covered that issue; she had to research existing laws and determine whether or not there was a need for new legislation. (**See related story, *Get to Know Your SMS Policy & Research Team*, on page 30.**)

In this case, there was no legislation, and the commission sent out letters with information about the importance of wearing helmets to physicians around the state. Some physicians were already working on local ordinances in their communities and needed additional information. At least one community passed a local ordinance requiring children under 16 to wear helmets. The research provided by the SMS Commission on Injury Prevention and Control, helped the leaders in that community pass the ordinance.

The SMS maintains an active Public Affairs department that works hard to represent your interests in the legislature.

As an aside, the SMS Board of Directors did adopt the position that the SMS supports legislation requiring minors to wear bicycle helmets, and the bill has already been drafted and introduced.

The SMS maintains an active Public Affairs department that works hard to represent your interests in the legislature. The department, made up of Government Affairs, Policy & Research (**see page 30**), Quality (including the Medical Outcomes Research Project -- MORP), and WISPAC, the SMS's political action committee (**see page 28**), develops policy as directed by the Board and lobbies Wisconsin and US legislators for quality legislation that will improve the lives of physicians and the ways in which they conduct their practices.

Crafting Change

Once the resolution or Board action calls for the SMS to develop a policy and/or legislation, much of the research has already been conducted. Sometimes, the SMS adopts other states' language or AMA policies that have been successful.

In other cases, the SMS staff will craft the language and present it to legislators who will introduce it in session. A recent example is the Patient Protection Act. Representative Frank Urban, MD, working in conjunction with the SMS and the Medical Society of Milwaukee County, developed the bill that's been introduced.

In some instances, Kirby says the SMS seeks out a sponsor who is usually an influential chair or member of a key committee where the bill is likely to go for discussion.

And many times, the SMS will work with other groups, such as the Wisconsin Chapter of the American Academy of Pediatrics on the bicycle helmet legislation, to team up, share resources and influence the legislature to respond to an even larger group of constituents.

Not Always New Laws

Many state regulatory bodies, such as the Department of Health and Family Services and the Office of the Commissioner of Insurance, function with a framework of administrative rules that can be changed. An administrative rule is a regulation, standard, policy statement, or order-of-general application promulgated by a state agency. An administrative rule has the force of law.

Kirby points out that when trying to change rules within these organizations, the SMS drafts the policy to change the regulations, which can result in the desired effect without having to develop and pass legislation. As with Assembly and Senate bills, the SMS can testify in support or opposition of a proposed rule when an agency holds a public hearing. Such opinions are forwarded to the legislature for their review.

Government Intervention

"Today," says Kirby, "Many physicians feel that politicians are overly-involved in health care delivery decisions.

"Every day, it seems, new legislation is introduced to control some aspect of medical care: be it length of stays, prescriptions and procedures, or death and dying issues. It's gotten to the point that one wonders, are they going to legislate procedures and care body part by body part?"

The Public Affairs department tries hard to not simply react to proposed legislation, but to remain pro-active, to help introduce legislation that will best protect the patient-physician relationship. "That's the bottom line," says Kirby. "We choose our fights based on what's going to best protect that relationship."

Kirby explains that the SMS recognizes that sometimes, whether our members like it or not, the SMS has to be reactive, "...sometimes legislation is going to happen whether we want it or not.

"In those cases, it's especially important that we're 'at the table' having a say in what the final law will be.

"For example, we didn't want a 24- and 48-hour mandated length of stay for deliveries. We wanted the physician, not the government, to have the right to decide length of stay -- period.

"In the end, we settled for legislation that defines the minimum length of stay in order to protect the physician's rights.

"What physicians have to realize," says Kirby, "is that the government is involved, is passing laws that affect how a physician can perform patient care."

To counter bad intervention by the government, HMOs and insurers, physicians have to be involved in the process.

"You can't bury your head in the sand and say you don't want to deal with the government. If you accept Medicare and Medicaid patients, then you have to play by the rules. So you should participate in the rule making.

"You can't stand by and let it happen, which it will -- with or without you -- you've got to be involved."

As an SMS member, you're automatically involved: your voice is being heard every time the SMS adopts a new policy or introduces legislation. ❖

WISPAC Offers Physicians Opportunity to Get Involved, Make Difference

Peggy Partenfelder, SMS Political Membership Coordinator

WISPAC, THE **Wisconsin Physicians Political Action Committee,** is the State Medical Society's bipartisan political action committee dedicated to working on behalf of Wisconsin physicians. It is WISPAC's main purpose to ensure that the voices of physicians are heard by state government.

Physicians for Better Government (PFBG) is the SMS's conduit that is similar in nature to a PAC, but it is a direct-givers program. PFBG members, like PAC members, are contributors who are concerned with the future of medicine and the impact that government decisions have on medicine.

PFBG allows you to put money into your own individual account over which you have full authorization. Through the PFBG you are able to give money only to candidates you support, as well as receiving individual recognition from the candidates who are running for office.

The power that PACs possess can positively effect the political process. Physicians who bring their concerns to the attention of elected officials and are relentless in their pursuit of educating these officials, will be rewarded with quality legislation.

Assistant Majority Leader of the State Assembly, State Representative Bonnie Ladwig (R-Racine) regards PACs as an avenue for individuals to explore the political process as well as educate elected officials about issues central to the medical community.

"Political action committees allow people who normally aren't involved in the political process the ability to support candidates that represent their view points and address their issues of concern," said Ladwig.

Involvement in the political process is essential in today's world. Legislative, as well as regulatory decisions, can affect virtually every aspect of your practice.

Many physicians are not opposed to positive health care reform which will safeguard the rights of your patients as well as respect your professional autonomy. However, if you are not heard, government can and will interfere with critical medical care. Decisions that should be left up to you and your patients will be in the hands of the government.

Actively involving yourself with WISPAC and the political process will aid in the development of worthwhile legislation.

"Political involvement through WISPAC is the foundation for advancing good medical policy for the State of Wisconsin," said WISPAC chair, Kenneth Viste, Jr., MD.

With the Wisconsin State Legislature in full swing, the time to get politically involved and active in WISPAC is now. A new piece of legislation has emerged which could undo all SMS's hard work from last session. State Senator Alice Clausing has introduced legislation that would *repeal tort reform.* This potentially harmful legislation would remove the $150,000 cap on the amount of damages recoverable in wrongful death actions as well as the $350,000 cap on the amount of non-economic damages recoverable in medical malpractice actions. This legislation is in its early stages of development, but it has the potential to be unimaginably damaging to the medical profession. Hoping that this legislation isn't passed into law is not enough. You must be politically active in order for this legislation to fail.

Becoming a contributing member of WISPAC is the first step to ensuring that positive health care changes will be brought to Wisconsin. The money that you give will be used to support candidates who support medicine. This money will also aid in educating our government on the issues most important to you and your practice; however, donating money is just the beginning of your WISPAC membership.

Actively involving yourself with WISPAC and the political process will aid in the development of worthwhile legislation as well as provide the ability to stop potentially harmful legislation from occurring. The most effective way to successfully combat or support pending legislation is through a group effort, that group is WISPAC.

According to State Representative Mark Meyer (D-La Crosse), member of the State Assembly Committee on Health, inactivity by the medical community allows the Legislature to believe that all is well with the medical profession.

"When you choose not to get involved, legislators in Madison think that everything is okay," said Meyer.

"It is important that members of the medical field are active in shap-

ing elections and legislation that are important to them."

There are many ways in which to actively involve yourself in WISPAC. Contact your state representative, state senator or even United States legislator. The SMS has developed a **Physician Key Contact Program**. This program pairs you with a legislator that you already know or a legislator that you want to get to know. If a specific bill is introduced that requires input from physicians, the SMS will then ask you to contact your legislator to discuss the bill and its possible effects on the medical profession. The SMS needs to be able to utilize your knowledge of these issues to help make sure that only constructive health care reform takes place.

The impact of personal contact with a legislator on a specific issue must not be underestimated. Who better to explain medical issues to elected officials than the physicians who are on the front line seeing patients daily? As physicians, you are the only individuals who truly know how each piece of legislation will effect your practice.

Another way to involve yourself with the political process is by attending **Legislative Day**. Legislative Day, sponsored by SMS, enables you to meet with your own elected officials to discuss issues that are important to you, your patients and to the future of medicine. Legislative Day is a superb vehicle by which you can help educate your legislators on important health care issues. This conference is held biennially in Madison at the State Capitol. Taking the time to attend this conference will demonstrate that the SMS is an active and supportive coalition. Active coalitions are not only heard by the Legislature, they are persistent and are routinely victorious.

As you can see, there are numerous reasons to be involved in politics. By joining WISPAC and or PFBG you are sending a strong message to our elected officials that physicians care about those candidates who listen to them. Becoming a part of the political process and staying informed lets the legislature know that physicians will be heard and that doctors support candidates who support medicine.

If you don't act now to help shape the health care system, government will only be hearing the opinions of trial lawyers and the insurance companies. If you want trial lawyers and insurance companies dictating the future of health care, please, remain silent.

If giving government a second opinion on how to pattern health care in Wisconsin sounds like a good suggestion, WISPAC is what you're looking for.

Having a say in how government effects your practice should be a top priority. After a bill becomes law it is too late to fight. Take the time to get involved. Become a member of WISPAC today! The money and the time that you put into WISPAC will be returned to you ten fold in the form of good government, quality legislation and the knowledge that government will not interfere with medical care unless you, as doctors, allow that to happen. **For more information on WISPAC or PFBG, contact Peggy Partenfelder at SMS ext 232, or via e-mail at: PEGGYP@smswi.org.** ❖

Get to Know Your SMS Policy & Research Team

Jeremy Pittenger, contributing editor

WITH SO MUCH health care information available, so many issues to comprehend and new questions arising daily with the always-changing health care system, where does one turn for straight-forward, honest and well-researched answers?

Turn to your Policy Team

In Wisconsin, physicians and their staff are welcome, and encouraged, to utilize the SMS policy analysts -- one of the largest and most impressive state medical society policy teams in the country -- according to Mike Kirby, SMS VP, Public Affairs, to find answers to a broad array of health care questions.

The SMS policy and research team, a division of the Public Affairs department, consists of three full-time policy analysts and two support staff. Each policy analyst is assigned to certain health care issues. For instance, Anne Marie Bicha currently handles tort reform and Patients Compensation Fund issues; Lynn Sherman concentrates on public health issues; and Kevin Wymore can answer questions relating to Medicaid and maternal and child health. Of course, they are not limited to these topics and their areas of expertise may change as the health care system continually evolves.

Working Within the Organization

The policy team is primarily responsible for performing all the background research on health care issues facing organized medicine, and reporting its findings back to SMS commissions, task forces, related committees, and the Board of Directors. They also clarify and summarize SMS committee discussions into policy.

For example, in 1995, during the Medicaid managed care expansion planning process, Medicaid officials decided to require enrollment for recipients - - even if there would only be one health maintenance organization in the recipient's area. In response to this mandate, the SMS Health Care Financing and Delivery Commission decided that patients and physicians would be better served if patients would only be required to enroll in a Medicaid HMO if they had a choice between at least two HMOs.

The policy team is primarily responsible for performing all the background research on health care issues facing organized medicine, and reporting its findings back to SMS commissions,... and the Board of Directors.

After the commission and Board of Director's approval of the recommendation, the Medicaid officials relented and allowed SMS policy concerning enrollment conditions to govern the program's implementation. As a result, more than 20,000 patients now have a choice of whether to choose a Medicaid HMO, or stay in the fee-for-service environment.

During such a process, it is the duty of the policy analyst to report on potential problems or make suggestions to improve the clarity of the policy stance. The policy team will research what other states are doing or have done, examine the problems other medical societies have experienced with similar policies, and study the effect policies will have on our state. Ultimately, commissions decide the best plan of action for recommendation to the Board. However, it is the responsibility of the policy team to make sure commission members have all the information necessary to make educated decisions.

For those of you who attended the Annual Meeting in Green Bay last month, you probably were aware that policy analysts were in attendance at many of the reference committee sessions. The policy team attends SMS commission, Board of Directors, reference committees, and other related meetings in order to answer questions that may arise out of discussions on particular issues. As a matter of fact, they do nearly all the research and preparation of the commission reports for the Board of Directors. Their knowledge of the issues, combined with the expertise of SMS physician members, creates a well-organized and highly-efficient policy-making structure.

Converting Policy Into Action

An example of a policy that resulted from an organization-wide effort, meaning it went before a commission, the Board of Directors and the House of Delegates, is a 19-point plan first developed over the period from May 1984 to February 1985 by the Medical Liability Committee (now known as the Medical Liability and Risk Management Commission). The plan has helped shape SMS policy on many issues involving medical malpractice (tort) reform.

Two years ago, when the climate was favorable for tort reform, the commission, with the approval of the Board of Directors, helped prioritize the items favorable for pas-

sage in legislation. The legislation that passed, 1995 Wisconsin Act 10, achieved a number of tort reform items, most notably a $350,000 cap on non-economic damages in medical malpractice cases, which has significantly lowered the Patients Compensation Fund (PCF) fees for physicians. The cap is expected to save Wisconsin physicians $50 to $60 million in PCF fees over a five-year period that began in July 1995, and reduce what physicians would have paid into the Fund by well over 11% per year.

Addressing Your Individual Needs

The work of an SMS policy analyst does not stop with commission and Board meetings. They also provide research on legislation, state and national regulations and other issues to individual physicians and their patients.

"We want our members to feel comfortable picking up the phone and seeking our assistance," says Kevin Wymore.

"This is in-line with the SMS mission statement of making sure 'physicians are equipped to deal effectively with the economic and political aspects of practice..."

The SMS policy team regularly answers questions from physicians and their patients who call seeking information on anything ranging from seat belt usage statistics to Medicare information to recent changes in the worker's compensation system.

"Constituent service is a lot of what we do," says Lynn Sherman. "That is, we take calls from patients and try to assist them with their problems. Sometimes people just need someone to explain their options. A frequent example would be someone who is sick and doesn't have insurance. We can tell them what their options are."

Reaching Out to the Public

The policy team spends much of its time collecting and researching information on health care-related issues and they want to share their findings with you. The SMS is fortunate because it has a staff of three full-time analysts ready to serve your policy-related needs.

"Having three people on a medical society policy team is not the norm," says Kevin Wymore. "In comparison to even larger states, we are fortunate in this regard. We know we have an advantage of having three people on our team -- that's why we see ourselves as an extra service to our members. We want them to feel free to contact us. We are here to serve them."

The SMS policy team regularly answers questions from physicians and their patients who call seeking information on anything ranging from seat belt usage statistics to Medicare information to recent changes in the worker's compensation system.

"The bottom line is that's why we are here," says Anne Marie Bicha. "If you have even the slightest question, ask us. If we are unable to answer it, we can at least point you in the right direction of someone who can."

The policy team doesn't just answer questions though. Perhaps you have an idea regarding implementing a public health issue. Sometimes, you may not know where to begin. A good place is to begin with the policy team. They can tell you if it's been tried before, the advantages or disadvantages of acting upon the idea or put you in contact with the right state agency or SMS commission to assist you with implementation.

One of the most successful initiatives the SMS policy team has been involved with is the CHILD SAFE program. Started in 1994, the CHILD SAFE program educates the public on injury prevention efforts, such as gun safety. Because of the initial interest of several physicians, CHILD SAFE blossomed to a point where physicians in over 50 Wisconsin counties participate. CHILD SAFE has provided over $63,000 in matching grants to help physicians get involved in their communities. Already, more than 15,000 trigger locks and hundreds of bike helmets have been distributed. Lynn Sherman continues to work on this project and welcomes more physician participation.

In addition to assisting members and the general public, the SMS policy team works directly with other SMS staff, particularly the field staff and lobbyists, to answer their questions at a moment's notice. For instance, an SMS Field Director may be on the road meeting with physicians who want more information on a certain issue, or SMS lobbyists may be meeting with legislators and need answers to specific policy-related questions quickly: the policy team has the resources to answer many of the questions in minutes.

The policy team is also available for speaking engagements and presentations. Policy analysts are often asked to attend county medical society meetings to update members about recent state and local initiatives.

Where do the policy analysts get all their information? Besides working with other medical societies and talking with physicians, the SMS policy team serves as liaisons with many outside organizations. Several state agencies and

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bureaus have SMS policy analysts serving on their task forces and advisory groups, charity organizations often ask for SMS representation on committees and the policy analysts are involved with several professional organizations.

All these memberships serve as excellent networking opportunities. By meeting with other people in the health care industry, the SMS policy analysts increase their information base.

At the same time, it is also a way for the SMS to monitor what other agencies and organizations are doing in the way of policy. It also benefits you, in that if you have a problem the SMS policy analysts can bring this concern to the many external meetings, governmental committees and work groups that they attend. Of course, the policy team also works closely with other state medical societies and the AMA in comparing what groups are doing around the country, and what policy best meets member needs.

The SMS "policy team" seated from left to right, analysts Lynn Sherman, Kevin Wymore and Anne Marie Bicha. Mike Kirby, SMS VP, Public Affairs, standing.

What's Ahead for the SMS?

As we look forward, the SMS policy team will be working on a number of issues. The degree of uninsured patients will continue to be a main focus for many organizations, including the SMS. Work has already begun on the Patient Protection Act, malpractice initiatives, tobacco issues and more. The new "Wisconsin Works" (W-2) welfare reform law is also receiving a lot of attention. The SMS policy analysts are busy responding to questions and concerns regarding this new program.

Remember, if you have questions about getting involved or want to know what physicians are discussing during committee, commission or task force meetings, feel free to call or e-mail the SMS policy analysts. In addition, if you know of something going on in your community or discover a study or report that our members should be apprised of, let the SMS policy analysts know. Many of the stories and reports that appear in *Medigram*, *WMJ* and WISMED, the SMS Web page, are the direct result of physician member input.

For more information on these issues or other SMS policies, continue reading updates in *Medigram*, *WMJ* and WISMED. You may also wish to request the SMS Policy Compendium, which outlines SMS policy as defined by the House of Delegates at the Annual Meeting. Additionally, you are always welcome to attend any of the SMS commission meetings. It's your participation that puts the SMS policy analysts to work for you.

Anne Marie Bicha received her bachelor's degree in finance from Marquette University and a Master of Arts in Business-Health Services Administration from the University of Wisconsin-Madison. She has been with the SMS since October, 1993. **Contact Anne at (800) 362-9080, ext 237 or e-mail her at: ANNEB@smswi.org.**

Lynn Sherman received her bachelor's degree in political science from the University of Colorado. She worked in Washington, DC for three years on environmental policy issues. She received her master's degree in Public Policy and Administration from the University of Wisconsin-Madison. Lynn has been with the SMS since February, 1994. **Contact Lynn at (800) 362-9080, ext. 235 or e-mail her at: LYNNS@smswi. org.**

Kevin Wymore received bachelors' degrees in journalism and political science from the University of Iowa. He received a master's degree in public affairs, with a health policy concentration, from the University of Minnesota's Humphrey Institute. Prior to coming to the State Medical Society in July, 1993, he served as a program evaluation analyst with the Wisconsin Legislative Audit Bureau. **Contact Kevin at (800) 362-9080, ext. 236 or e-mail him at: KEVINW@ smswi.org.** ❖

Heat-Related Illness and Death, Wisconsin, 1995

Lynda Knobeloch, PhD; Henry Anderson, MD; Jon Morgan, MS; and Ray Nashold, PhD, Madison

Abstract

This article examines heat-related illnesses and deaths that occurred in Wisconsin during the summer of 1995, which was among the warmest seasons on record. Death certificates that listed heat exposure as a contributing or underlying cause of 154 deaths and ambulance run reports for 454 heat-related emergency calls were analyzed. The time and place of these events and patient information were used to evaluate risk factors such as age, medical condition, physical activity, and environmental temperature. Three-fourths of the deaths and nearly half of the heat-related illnesses occurred during or shortly after two days of intense heat. Major risk factors for these heat-related illnesses and deaths included age, underlying chronic illness, physical exertion, and lack of air-conditioning. To reduce the number of illnesses and deaths that occur during future heat waves, all residents should be advised to install air-conditioning systems in their homes or apartments and encouraged to use them when indoor temperatures are uncomfortably warm. Summer weather forecasts should include heat index information. During periods of extreme heat, public health advisories should be issued encouraging residents to seek shelter in air-conditioned areas and to avoid strenuous outdoor activities and prolonged sun exposure. Region-specific criteria and procedures for issuing public health advisories should be developed jointly by the National Weather Service and the US Centers for Disease Control and Prevention.

Knobeloch, Anderson, Morgan and Nashold are with the Wisconsin Department of Health and Social Services. Reprint requests to: Lynda Knobeloch, PhD, Bureau of Public Health, 1414 E. Washington Ave, Rm 96, Madison, WI 53703-3044.

Introduction

During the winter months, most Wisconsin residents look forward to the sunny, warm days of summer. However, few were prepared for the unusually hot weather they experienced during the summer of 1995. According to the National Weather Service, June, July and August of 1995 were among the hottest months on record. In the nine-week period between June 15 and August 19, Wisconsin experienced several days of unusually

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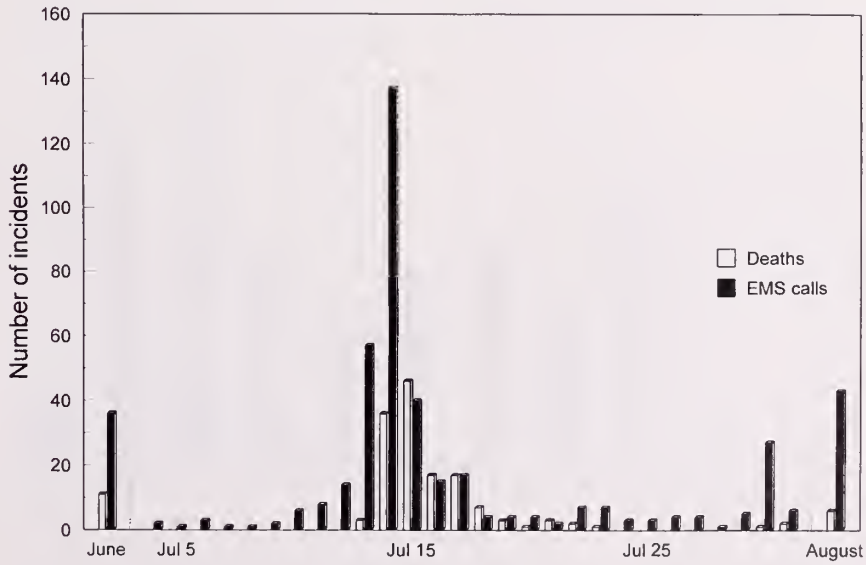

Figure 1. Daily incidence of heat-related EMS calls and deaths.

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hot weather which resulted in many heat-related illnesses and deaths. Two previous reports briefly described the heat-related mortalities that occurred during this period.[1,2] This article examines the geographic and temporal incidence of medical emergencies and deaths that occurred as a result of the intense heat in greater detail, and evaluates the importance of several medical and environmental risk factors in the etiology of heat-related illness. It is hoped that this review will improve the ability of state and local agencies to reduce the incidence of heat-related illness and death in the future.

Methods

Weather data for Green Bay, Eau Claire, Madison, Milwaukee, and Rhinelander were obtained from the National Weather Service. Mortality data were obtained from death certificates filed with the Wisconsin Center for Heath Statistics and from the US Centers for Disease Control's Compressed Mortality File (CMF). CDC's Wide-ranging Online Data for Epidemiologic Research computerized information system was used to access CMF data.

The Bureau of Public Health's Section of Emergency Medical Services sent letters to 450 licensed ambulance service providers requesting copies of all ambulance run sheets for heat-related illnesses or deaths. Seventy-eight providers received such calls and submitted 454 reports. The time, date, and location of each call as well as information about the patient's condition, medical history, medications, and the treatment regimen were analyzed using EpiInfo Software provided by the National Centers for Disease Control and Prevention.

Results

Weather Data

Wisconsin's first summer heat wave began on June 16, 1995, when the high temperature reached 90°F in Eau Claire. High temperatures in Eau Claire, Rhinelander, Green Bay, and Madison remained in the 90s for seven to eight days, however, the Lake Michigan shoreline was significantly cooler with highs in Milwaukee reaching 90° F on only three days. The most severe heat wave began on Wednesday, July 12, when the temperature reached 91° F in Milwaukee and 94° F in Eau Claire and Madison. On Thursday, high temperatures exceeded 100° F throughout the state. Weather stations located at the Milwaukee and Dane County airports reported afternoon highs of 103° and 101° F on Thursday, 102° and 99° F on Friday and 92° and 95° F on Saturday, respectively. Due to high humidity levels in the southern half of the state the apparent maximum temperatures, or heat indexes, on Thursday and Friday exceeded 120° F. Conditions returned to normal on Sunday and remained seasonal throughout the remainder of July. However, a third, milder heat wave entered southern Wisconsin in mid-August when the high temperatures exceeded 90° F on seven days in Madison and on four days in Milwaukee.

Heat-Related Deaths

Between June 20 and August 19, 81 Wisconsin residents died as a direct result of the hot weather (ICD no. E900.0). Seventy-three of these deaths occurred during or shortly after the July heat wave (Figure 1). Residents whose deaths were attributed to heat exposure ranged from infancy to 97 years; however the majority were more than 60 years of age (Figure 2). More than 70% of these fatalities were reported by counties bordering Lake Michigan (Figure 3).

In addition to the deaths described above, heat exposure was identified as a contributory cause on the death certificates of 73 Wisconsin residents. The average age of these decedents was 78 years, with 90% of the deaths involving residents who were at least 65 years old. Four of the youngest decedents in this group included a 43-year-old male, a 53-year-old male and a 53-year-old female whose deaths were caused by acute alcohol intoxication, and a 46-year-old female who died of an accidental drug poisoning. Other underlying

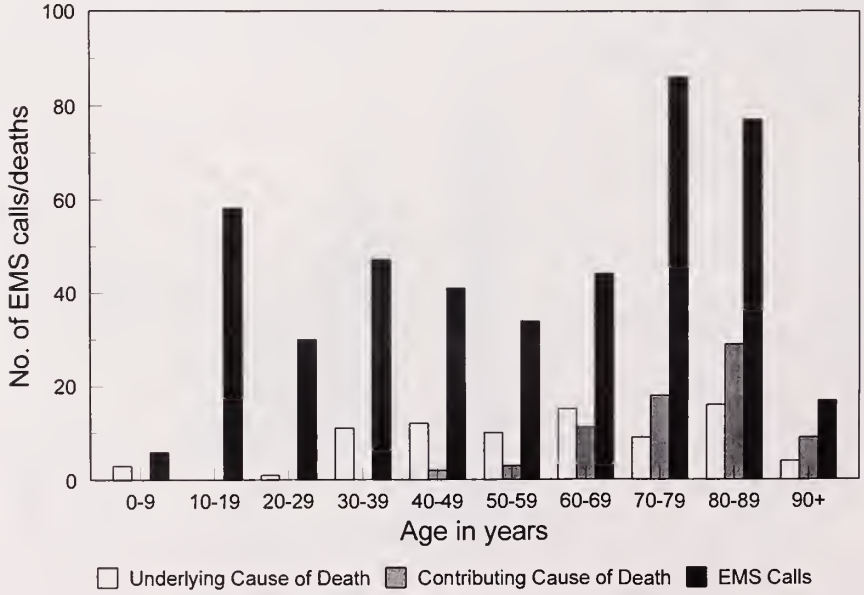

Figure 2. Age distribution of heat-related EMS calls and deaths.

causes of these deaths included coronary artery disease (43), chronic airway obstruction (7), hypertensive heart disease (5), acute myocardial infarction (3), congestive heart failure (3), other cardiovascular conditions (3), acute alcohol intoxication (1), cerebrovascular disease (1), breast cancer (1), renal failure (1), essential hypertension (1), an electrolyte/fluid imbalance (1), and an insulin reaction (1). The statewide distribution of these fatalities was unusual in that nearly 80% (57 of 73) of them were reported by Milwaukee County. Other counties reporting more than one such death included Dane (4), Fond du Lac (2), and Racine (4). In addition, single deaths occurred in Iowa, Jackson, Outagamie, Vernon, Winnebago, and Wood counties.

Psychotropic Drugs as a Contributing Risk Factor

The use of psychotropic drugs was indicated on the death certificates of thirteen males and five females aged 24-81 years whose deaths were attributed to excessive heat exposure as the underlying cause. In addition, excessive heat exposure was identified as a contributing cause in the death of the 46-year-old female described previously whose death was caused by an "accidental poisoning by . . . drugs acting on the central and autonomic nervous system."

Medical Emergencies

Seventy-eight ambulance service providers submitted 454 reports for heat-related calls that were made during the summer of 1995. These reports provided information about emergencies that occurred in forty of Wisconsin's seventy-two counties. EMS patients included 236 females and 218 males who ranged in age from infancy to 97 years (Figure 2). Approximately half of these emergencies involved residents who were 65 years of age or older and nearly three-quarters of the patients in this age group had at least one chronic health problem which may have increased their sensitivity to heat. Almost 80% of these older patients were found in their homes which were frequently described by emergency responders as "hot," "extremely warm," or "not air-conditioned" (Table 1). In contrast to this older age group, the majority of patients under the age of 65 years did not report chronic health conditions and half of these patients were overcome by heat while participating in work- or sports-related physical activities. Consequently, most of the ambulance runs for young, healthy patients were to recreational areas, roadsides, manufacturing facilities, or commercial sites.

Counties Reporting Heat-Induced Deaths

Region	Rate/100,000
Milwaukee County	3.5
Lake Michigan counties	3.9
Remainder of state	0.7
Statewide	1.6
Age < 65 years	1.1
Age >64 years	5.4

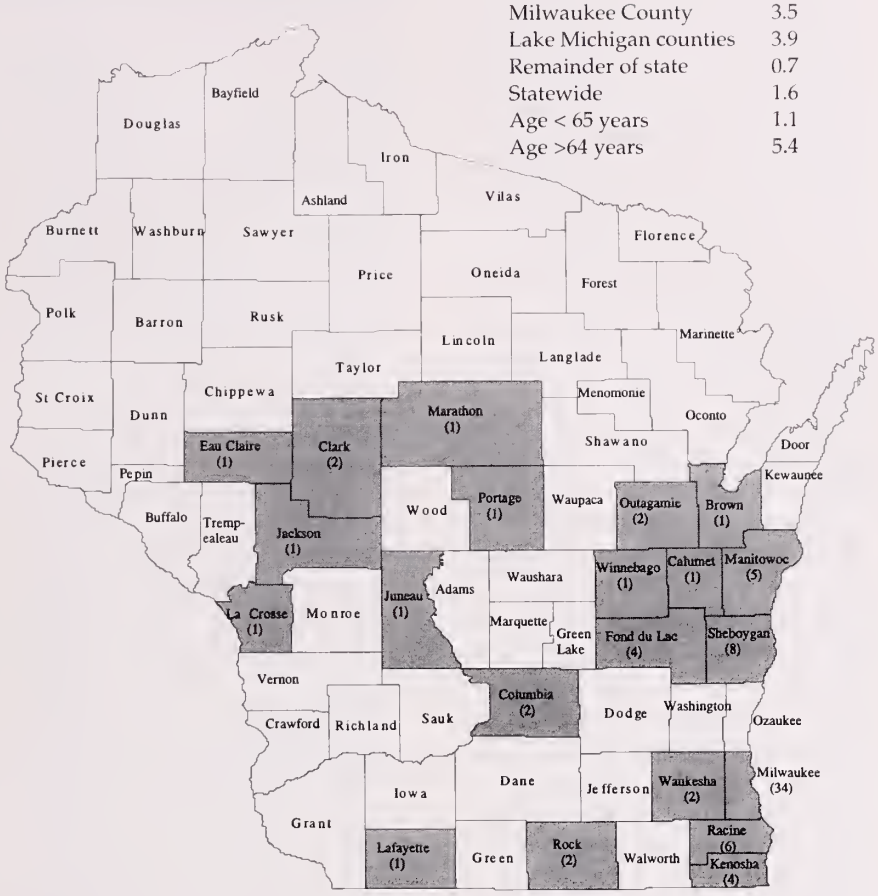

Figure 3. Map displaying the number of excessive heat deaths [UCOD-ICD E900.0] reported by each county. Inset contains attributable death rates by region and age group.

Medication Use

Four hundred-twelve ambulance reports included information about patient medications. One hundred forty-four (35%) of these indicated that no prescription medications were used. Two hundred sixty-eight patients were taking at least one prescription medication and a total of 127 different prescription medications were identified. Seventy-six patients were taking medications for treatment of hypertension. The most common

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antihypertensives listed were diuretics such as furosemide or hydrochlorothiazide. Digitalis, a drug used to manage cardiac failure and arrhythmia, was listed on eighteen emergency medical reports. Thirty-one EMS reports mentioned psychiatric medications with eleven of these identifying tricyclic antidepressants, such as amitriptyline or nortriptyline and several others citing medications used to control anxiety or schizophrenia.

Information about prescribed medications provides a marker for illnesses that can reduce an individual's ability to withstand intense heat. In addition, many of the drugs listed on the EMS reports have the potential to cause adverse effects such as dehydration, electrolyte imbalances, a decreased ability to perspire, or mental confusion. These effects can exacerbate the effects of prolonged heat exposure either by intensifying physiologic changes, like dehydration and pyrexia, or by decreasing the individual's ability to recognize and respond appropriately to this life-threatening situation.

Table 1. Number of EMS Reports Citing Specific Risk Factors

	Patient Age		
	< 65 yrs n = 236	≥ 65 yrs n = 218	All Ages n = 454
Health Conditions			
Heart disease	15	75	90 (20%)
Hypertension	24	51	75 (17%)
Diabetes	13	24	37 (8%)
Stroke	2	20	22 (5%)
Psychiatric disorder	23	14	37 (8%)
Emphysema/COPD	5	20	25 (6%)
Asthma	20	11	31 (7%)
Parkinson's disease	2	6	8 (2%)
Cancer	1	7	8 (2%)
Multiple sclerosis	2	1	3 (1%)
None/unknown	132	61	193 (43%)
Other risk factors			
Work-related activity	65	7	73 (16%)
Other physical activity	52	9	61 (13%)
No air conditioning	30	107	137 (30%)
Outdoor temp > 90 F	165	150	315 (69%)
Location of call			
Private homes	64	158	222 (49%)
Nursing homes	3	11	14 (3%)
Other	169	49	218 (48%)
Initial Status			
Alert	188	150	338 (74%)
Semi-conscious	21	31	52 (12%)
Unconscious	21	26	47 (10%)
Pulseless/No respiration	6	11	17 (4%)

Temporal and Geographic Trends

The daily and hourly incidence of heat-related calls was strongly correlated with recorded temperatures. As shown in Figure 1, almost half of the heat-related ambulance runs occurred on July 13 and 14 when afternoon temperatures exceeded 100° F throughout most of the state. Only 5% of these calls occurred on days when the high temperature was below 80° F and less than one third of these incidents involved temperatures below 90° F. Less than 10% of these runs were made between 11:00 p.m. and 7:00 a.m. when daily temperatures are typically coolest, while nearly half were made during the late morning and afternoon hours, which tends to be the warmest part of the day. This hourly incidence may also reflect the effect of human activity since most work- and recreation-related physical exertion occurs during the daylight hours.

The effects of the hot weather were most devastating in counties bordering Lake Michigan with Milwaukee (185), Racine (55), Sheboygan (15), Brown (8), Kenosha (6), and Ozaukee (3) counties reporting 60% of the heat-related EMS calls. Other counties reporting more than ten such emergencies included Dane (34), Waukesha (22), Juneau (16), Monroe (12), and Marquette (11).

Two unusual clusters of heat-related illnesses were reported. These included seventeen students aged seven to 19 years who were transported to Dane County hospitals after being overcome by heat while marching in an afternoon parade. This incident took place on July 30 when the afternoon temperature reached 93° F. The second cluster involved seven military cadets, aged 12 to 17 years, who were treated for symptoms of dehydration after working outdoors all day on July 17. The nearest weather station reported a high temperature of 79° F that day.

In addition to these incidents, several other ambulance reports described recreational activities such as bicycling, running, or golfing; outdoor work such as crop harvesting, mail delivery, or lawn care; or work performed in hot environments such as foundries, food processing plants, commercial

kitchens, or un-airconditioned vehicles.

Discussion

Heat exposure is a rare cause of death in the US. A review of national mortality records for the fourteen-year period from 1979 to 1992 identified 2,207 deaths that were attributed to excessive heat due to weather conditions (ICD E900.0).[1] The national mortality rate for this cause was 0.66 per million resident-years. States reporting crude mortality rates of 1.0 per million resident-years or more for this cause of death included Missouri (4.8), Arizona (3.6), Arkansas (3.5), Kansas (3.5), Nevada (1.9), Georgia (1.7), South Carolina (1.6), Iowa (1.5), and Oklahoma (1.1). During this time period, Wisconsin reported 20 (0.3 per million resident-yrs) heat-related deaths. Since national mortality records do not include secondary diagnoses, the actual number of deaths caused by exposure to excessive heat may have been substantially higher, however.[2] The incidence of heat-related illness is even more difficult to assess since health care providers are not required to report these events and the majority of cases may not require medical treatment.

Only the most serious heat-related illness, heat stroke, is likely to result in a hospital admission. Heat stroke occurs when perspiration and other physiologic responses to heat exposure become insufficient. Clinical diagnosis is made when the body temperature rises to 105° F. Patients suffering from heat stroke may become delirious, stuporous, or comatose. This life-threatening condition is considered a medical emergency and can cause permanent neurological damage or death if not treated promptly.[2] Heat exhaustion, heat syncope, and heat cramps are much less serious. Symptoms of exhaustion and muscle cramps are caused by the loss of fluid and electrolytes that occurs during excessive perspiration. Once rehydrated and moved to a cooler environment, most patients recover quickly with no long-term sequelae. Heat syncope refers to a sudden, brief loss of consciousness which is usually associated with physical exercise. It typically affects people who are not acclimatized to hot weather. The syncopal episode is precipitated by a sudden decrease in cerebral blood flow secondary to the dilation of blood vessels in the dermis.[4]

It is unclear why the majority of deaths and illnesses were reported by communities that border Lake Michigan. It has been suggested that heat indexes might have been higher in the inner city neighborhoods due to an effect termed " the urban heat island" which is caused by the tendency of brick, asphalt, cement, and concrete building materials to absorb and retain heat. Unfortunately, it is impossible to evaluate this effect without inner city temperature data which were not collected. Regional temperature and humidity data provided by the National Weather Service[1] do not indicate significantly higher temperatures or humidity readings in the Lake Michigan region during the July heat wave relative to other counties in the southern half of Wisconsin. Better recognition and reporting of heat-related incidents by physicians and EMS responders in Lake Michigan counties has also been suggested as a possible explanation for our findings. However, the magnitude of the observed regional differences in illness and death rates would require the majority of cases in the remainder of the state to have been misdiagnosed or unreported which seems unlikely. It is plausible that residents of communities located near Lake Michigan where summers are usually cooled by lake breezes were simply less prepared for the extreme weather conditions than other Wisconsin residents. The frequent mention of "upper floor apartments" and "attic bedrooms" with "fused windows" and "no air-conditioning" on many of the EMS reports from these areas indicates that a combination of housing factors may also have exacerbated the devastating effects of the heat wave in these communities.

Conclusions and Recommendations

Since weather conditions similar to those that occurred during the summer of 1995 are likely to recur in Wisconsin and elsewhere in the US, residents should be made aware of the health impacts of prolonged heat exposure and advised to prepare for these events. All homes and apartments should have at least one room that can be air-conditioned. This is particularly important for people who are elderly or disabled, and for patients who have health conditions that increase their sensitivity to heat. Fans are not an adequate substitute since they tend to exacerbate the effects of heat under some conditions.[3] Recommendations that residents use beaches, pools, shopping malls, or public shelters to cool off during periods of extreme heat are inadequate to protect the most vulnerable residents, many of whom are unwilling or unable to leave their homes. The Department of Commerce report, *July 1995 Heat Wave*,[6] which summarized heat-related deaths that occurred in Milwaukee and Chicago, concluded that "those most likely to be affected were those who were: (1) unlikely to receive warnings and forecasts disseminated in the normal fashion; (2) unable to fully appreciate the significance of the warnings and forecasts; (3) uninformed about proper precautions and actions that they should take to protect themselves from the effects of the heat; (4) too poor to have adequate air conditioning or

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to operate it even if available; (5) too frightened of crime to leave their windows opened; (6) or too weak, infirm, or frightened to seek public shelter."

Summer weather forecasts should include heat indexes (or apparent temperatures) which are expressed in degrees F and calculated using temperature and humidity data since these are the most accurate predictors of heat stress.[2] The National Weather Service and the US Centers for Disease Control and Prevention should work together to develop criteria and procedures for declaring heat alerts. Although heat indexes were not available for most of the cases summarized in this report, our findings suggest that a two-tiered public warning system may be appropriate. When an afternoon high temperature of 90° F or higher is predicted, people of all ages should be encouraged to refrain from strenuous outdoor activities during the hottest part of the day, to maintain adequate fluid intake, and to use air conditioners. Event organizers should consider postponing parades and sporting events or make special arrangements to prevent participants from becoming overheated or dehydrated. Employers can protect workers from heat stress by scheduling outdoor work during early morning or evening hours, allowing frequent breaks in air-conditioned or shady areas, and providing them with plenty of fluids while they are working. Employers and organizers of sporting events should be familiar with the symptoms of heat exhaustion and heat stroke and be prepared to respond to these emergencies.

When the high temperature exceeds 100° F, a more urgent warning should be issued advising residents to avoid all outdoor activities and seek shelter in air-conditioned areas. Both of these alerts should include information about the symptoms and treatment of heat exhaustion and heat stroke. During periods of extreme heat, public health agencies and volunteer groups may need to establish shelters and provide transportation for elderly and disabled residents. Residents who are too ill to be moved to these locations would benefit from room-sized air conditioners that could be provided at a reduced cost or as a temporary loan. Alternatively, cool showers and baths, or the application of cool, wet towels to the skin can also provide rapid, low-cost relief of the symptoms of heat exposure.

References

1. Nashold RD, Jentzen JM, Peterson PL, and Remington PL. Heat-related deaths during the summer of 1995, Wisconsin. *Wisc Med J* 1996; 95:382-3.
2. Morbidity Mortality Weekly Report. Heat-Wave Related Mortality, 45(24);505-507, Jun 21, 1996.
3. US Centers for Disease Control. National Compressed Mortality Records, 1979-1992.
4. Kilbourne EM. CDC Monograph, The Public Health Consequences of Disasters, Chapter 8: Heat Waves. US Department of Health and Human Services, 1989.
5. Berkow R, Fletcher AJ. The Merck Manual, 15th ed. Merck Sharp & Dohme Research Laboratories, Rahway NJ, 1987.
6. US Department of Commerce. July 1995 Heat Wave. Natural Disaster Survey Report. December 1995.
7. Becker RJ, Wood RA. Heat Wave: A major summer killer. National Weather Service Headquarters, Silver Spring, Md. ❖

Epidemic Heat Stroke in a Midwest Community: Risk Factors, Neurological Complications and Sequelae

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Abstract

We studied the admission rate, risk factors, neurological complications and sequelae of heat stroke (HS) during the 1995 heat wave in Madison, Wisconsin. HS was epidemic in 1995 (2.3 cases/1000 admissions), compared to the ten-fold lower endemic rate in 1994 (0.2/1000). There were 11 cases of HS, 9 males and 2 females. Contributing factors were athletic events (2), working outdoors (3) and indoor activity with malfunctioning air-conditioning (6). Medical conditions contributing to poor temperature regulation included schizophrenia with neuroleptic treatment (2), amyotrophic lateral sclerosis receiving nortriptiline (1), multiple sclerosis (1), attention deficit disorder (1), cystic fibrosis (1) and alcoholism (1). Acute neurological complications occurred in all patients on presentation induding coma (8/11,73%), stupor (2/11,18%) and seizures (1/11,9%). Two patients (1856) had persistent neurological sequelae in the form of a pan-cerebellar syndrome while the remaining 9 recovered fully. Importantly, avoidable factors contributed to all of the patients with underlying diseases. These patients are particularly at risk and should take adequate precautions during summer months.

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Introduction

Heat stroke (HS) is a medical emergency characterized by a core body temperature often greater than 105° F, hot dry skin and the sudden onset of confusion, delirium or coma.[15] Coagulopathy and multiple system organ failure contribute to the high (17 to 70%) mortality rate in HS.[8,15]

Neurological manifestations in the acute stage include: headache, faintness, hallucinations, vertigo, dysarthria, mutism, seizures and cerebellar ataxia.[2,9] Coma with meiosis and flaccid paralysis, hemiplegia and decorticate posturing have been described.[2,3,5,8,9] Although most patients recover without apparent neurological sequelae, cases with persisting mental changes, pan-cerebellar syndrome, flaccid paralysis and pyramidal, as well as extrapyramidal signs, are well documented.[2,3,5,8-10] The pathogenesis of these syndromes is not well understood.[2,3,8,10] Cell loss in the cerebral cortex, basal ganglia and cerebellum are attributed to direct thermal insult.[8,10] In the spinal cord, cell loss in the anterior and intermediolateral horns and fiber loss in the anterior roots were also attributed to direct effects of hyperthermia.[10] However, electrolyte disturbances, circulatory collapse, coagulopathy and microembolization may significantly contribute to nervous system pathology.[3,8,10]

HS is of two types: classical and exertional.[15] Classical HS typically occurs in epidemic fashion during summer. Most susceptible individuals are the elderly, patients with pre-existing medical problems such as arteriosclerosis, heart failure, diabetes, alcoholism, and those receiving medications that interfere with heat loss. Exertional HS occurs sporadically in healthy young individuals and is usually associated with physical exertion.[15]

During the summer of 1995, the Midwest, US experienced a severe heat wave. In Chicago, there were 465 heat-related deaths; an 85% increase over the incidence recorded in 1994.[14] Madison, WI, had the worst summer temperatures in history, with peak temperatures reaching up to 110°F. The ambient temperatures were up to 8° F higher than normal and the number of days with temperatures greater than 90° F were 27, in contrast to an average of 10 days in previous years. We studied the admission rate, risk factors, neurological complications and sequelae of heat stroke during the 1995 heat wave in Madison.

Methods

We identified as HS cases during the summer quarters of 1994 and 1995, patients admitted with confirmed core temperatures of >105°F (six in 1995) or having emergency cooling treatment prior to hospitalization (five in 1995, 1 in 1994). The demographic and medical characteristics of the HS patients were correlated with clinical presentation and outcome.

Results

HS was epidemic in 1995 (2.3

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cases/1000 admissions), compared to the ten-fold lower endemic rate in 1994 (0.2/1000). There were a total of 11 cases of HS, of which nine were men. Eight cases were of the classic type and three were exertional. The median age was 45 years (4-74 years). Contributing factors are shown in Table 1. Acute neurological complications occurred in all patients and included coma (8/11, 73%), stupor (2/11, 18%) and seizum (1/11, 9%). All patients recovered to baseline except two (18%), who developed persistent cerebellar syndromes. These are reported below.

Table 1: Risk factors for heat stroke:

Risk factors	n (%)
Pre-existing disease:	
schizophrenia on neuroleptics	2 (18)
ALS receiving Brain derived neurotrophic factor (BDNF) and nortriptyline	1 (9)
multiple sclerosis (MS)	1 (9)
attention deficit and hyperactivity disorder (ADHD)	1 (9)
cystic fibrosis (CF)	1 (9)
alcoholism	1 (9)
Athletic events	2 (18)
Working outdoors	3 (27)
Indoor activity with malfunctioning air conditioning	6 (55)

Case Reports

Patient 1

A 61-year-old alcoholic man was found unconscious in the team of his farm. His core temperature was 108°F. He was treated with ice packs and evaporative cooling, intubated and transferred to the hospital. On admission, he was comatose and pupils were 3 mm bilaterally, reacting normally to light. He had forced downward gaze. The corneal reflexes were intact. The extremities were flaccid and areflexic, with bilateral extensor planter responses. Brain CT on admission showed diffuse cerebral atrophy. His hospital stay was complicated with aspiration pneumonia and low-grade disseminated intravascular coagulation which responded well to medical therapy. After one week, his mental status cleared but his speech was slurred. He had ocular bobbing and rotatory nystagmus. He had truncal and bilateral appendicular ataxia. After eight weeks of occupational and physical therapy, he was able to walk with support, feed and shave himself, but had persistent cerebellar signs. Brain MRI showed marked cerebellar atrophy.

Patient 2

A 48-year-old chronic schizophrenic receiving neuroleptics was found unconscious in his apartment. His core temperature was 108° F. After aggressive cooling therapy, he regained consciousness. On admission, he was agitated and confused, scoring 10/28 in the mini-mental status examination (Folstein's). His speech was slurred and unintelligible. There was severe truncal and appendicular ataxia. The patient showed a steady improvement in the next six to seven weeks, while undergoing an extensive neurorehabilitation program. He continued to have persistent cerebellar signs. Brain MRI showed cerebellar atrophy.

Discussion

Eleven cases of HS were identified in the University Hospital and VA Medical Center at Madison. This represented a 10 fold increase over 1994, reaching epidemic proportions. Body temperatures above 108° F are associated with high mortally in heat stroke.[22] Although five of our patients had such high temperatures, none died, probably because of early implementation of on-site and hospital-based rapid cooling measures.[22]

Two patients (18%) had persistent sequelae in the form of a pan cerebellar syndrome. This relatively high figure is in contrast to that seen by Yaqub, who reported two cases of ataxia among 87 HS cases (2.2%), undertaking the Mecca pilgrimage.[4] This difference could be due to geographical variations or possibly a difference in baseline patient characteristics of the small population sampled.[15] Seven patients (63%) had underlying medical conditions (Table 1). Of these, attention deficit hyperactivity disorder (ADHD) and cystic fibrosis (CF) have not been previously described as risk factors for heat stroke. The patient with amyotrophic lateral sclerosis (ALS) was receiving nortriptyline, which, due to its anticholinergic properties, may interfere with sweat production. However patients with ALS may have subclinical autonomic dysfunction thus predisposing them to HS.[17] Autonomic disturbances are also known to occur in MS predisposing another patient to HS.[19] Also, medications commonly prescribed to MS patients, such as oxybutinin and amitriptyline may interfere with sweating and heat loss. Importantly, avoidable factors contributed in all the patients with underlying diseases. Inadequate or malfunctioning air-conditioning was seen in 55% and physical exertion in 45% of cases. Patients who

are particularly at risk (e.g., on high-risk medications) should be identified, for example by flagging their medical records, and a communication made (similar to an appointment reminder) to ensure that adequate precautions are taken during summer months.

References

1. Khogali M. Heat stroke: an overview with particular reference to the Mekkah pilgrimage.In Hales JRS, Richards DAB, eds. *Heat stress: Physical exertion and environment*. Excerpts Medical Amsterdam: Elsevier Science Publishers B V;1987:21-36.
2. Mustafa MKY, Khogali M, Gummea KA. Central nervous system, blood clotting and respiratory functions associated with heat stroke. In Hales J RS, Richards DAB, eds. Heat stress: *Physical exertion and environment*. Excerpts Medical Amsterdam: Elsevier Science Publishers B V;1987:277-288.
3. Mehta AC, Baker RN. Persistent neurological deficits in heat stroke. *Neurology* 1970;20(4):336 40.
4. Yaqub BA. Neurologic manifestation of heat stroke at Mecca pilgrimage. *Neurology* 1987;37:1004-1005.
5. Lin JJ, Chang MK, Sheu YD, Ting KS, Sung SC, Lin TQ. Permanent neurologic deficits in heat stroke. Chung Hua I Hsueh Tsa Chih - *Chinese Medical Journal* 1991;47(2):133-8
6. Delagdo G, Tunton T, Gallego J, Villanueva J. Spinal cord lesions in heat stroke. *J Neurol Neurosurg Psychtr* 1985;48:1065-1067.
7. CDC MMWR report. Heat related mortality - Chicago, 1995. *JAMA* 1995; 274(8):602.
8. Kielblock AJ. Strategies for the prevention of heat disorders with particular reference to the efficacy of body cooling procedures. In Hales JS, Richards DAB, eds. Heat stroke: Physical exertion and environment. Excerpts Medical Amsterdam: Elsevier Sience Publishers B V;1987: 489-497.
9. Provinciali L. Cangiotti A Tulli D. Carboni V. Cinti S. Skin abnormalities and autonomic involvement in the early stage of amyotrophic lateral sclerosis. *Journal of the Neurological Sciences* 1994; 126(1):54-61.
10. Linden D. Diehl RR. Berlit P. Subclinical autonomic disturbances in multiple sclerosis. *Journal of Neurology*.1995; 242(6):374-8.

Sleep, Sleep Disorders and Motor Vehicle Crashes

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Introduction

Awareness of sleepiness as a significant cause of traffic accidents and fatalities has sparked interest in this condition. In order to understand the scope of the problem, one needs to understand normal sleep, some sleep disorders, the ways of evaluating sleep disorders and both the extent and nature of crashes and fatalities associated with sleepiness. A proposal relating to sleep disorders and driving is then presented.

Normal Sleep

A simple behavioral definition of sleep is that it is a reversible state of perceptual disengagement from and unresponsiveness to the environment. Sleep is a complex amalgam of physiological and behavioral processes. Two separate states of sleep have been defined on the basis of a constellation of physiological parameters. These two states, non-rapid eye movement (NREM) and rapid eye movement (REM) sleep, are as distinct from one another as each is from wakefulness. Non-REM sleep is conventionally subdivided into four stages, defined by electroencephalographic and polygraphic criteria. REM sleep, by contrast (also defined by EEG and polygraphic criteria), is not divided into stages, although "tonic" and "phasic" types of REM sleep are often distinguished for certain research purposes. The tonic versus phasic distinction is based on short-lived events that tend to occur in clusters separated by episodes of relative quiescence. The most commonly used marker for REM sleep phasic activity in humans is the bursts of rapid eye movements. The mental activity of human REM sleep is associated with dreaming, based on vivid dream recall reported after 80% of arousals from this state of sleep. Inhibition of spinal motor neurons via brain stem mechanisms mediates suppression of postural motor tone in rapid eye movement sleep. A shorthand definition of REM sleep, therefore, is a highly activated brain in a paralyzed body.

Some generalizations about sleep in normal young adults can be made. Sleep is entered through non-REM phases. Non-REM sleep and REM sleep alternate through the night with each complete cycle lasting approximately 90 minutes. Slow wave sleep predominates in the first third of the night and is linked to the initiation of sleep. REM sleep predominates in the last third of the night and is linked to the circadian rhythm of body temperature. Wakefulness within sleep usually accounts for less than 5% of the night. Stage I sleep generally comprises 2-5% of sleep, Stage II sleep generally comprises 45-55%, Stage III sleep 3-8%, Stage IV sleep about 10-15%, non-REM sleep is usually 75-85% of sleep, and rapid eye movement sleep is usually 20-25% of sleep. (Figure 1).

The sleep-wake alternation in humans is an example of a circadian rhythm, which requires about 24 hours to complete (circa = about, dian = a day). Normal body temperature is another example of a circadian rhythm. Normal body temperature is about 36.8°C but regular and consistent 24-hour fluctuations occur around this mean. Temperatures are low during sleep, rise in the morning and peak concomitantly with a person's maximum efficiency. Endocrine secretions and metabolism are other examples of circadian rhythms. To entrain (synchronize) the circadian rhythm to the 24-hour cycle imposed by the sun, "zeitgebers" (indicators of time) are necessary. Zeitgebers may be clocks, meal times, work periods, or positions of the sun. In patients with circadian difficulties, the most powerful zeitgeber may be a regular wake up time. This signal is under voluntary control; wakefulness can be enforced with alarm clocks, cold showers, and other techniques. Bedtime is a less powerful zeitgeber, because falling asleep cannot be forced by pure willpower.

Circadian cycling is further complicated by many circadian rhythms within the same body. Unless synchronized daily, these different cycles may diverge, like inexact clocks. Such uncoupling develops when zeitgebers are weak; the resultant conflicting rhythms make sleeping variable and difficult.

Sleep Disorders

The main symptoms of disturbed sleep function continue to be excessive daytime sleepiness and fatigue, inability to fall asleep or stay asleep, and events occurring periodically during sleep. The latest international classification of sleep disorders developed in 1990 divides into:

1) Dyssomnias which include
   (a) intrinsic sleep disorders
   (b) extrinsic sleep disorders
   circadian rhythm sleep disorders

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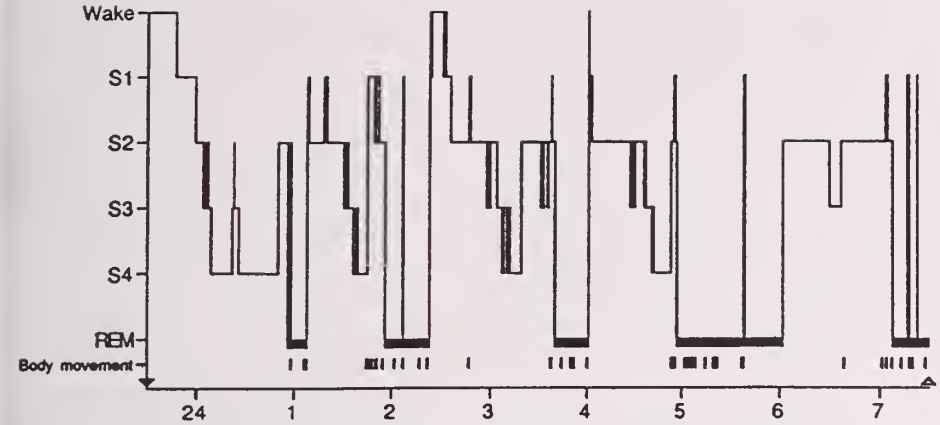

Figure 2–7. The progression of sleep stages across a single night in a normal young adult volunteer is illustrated in this sleep histogram. The text describes the "ideal" or "average" pattern. This histogram was drawn on the basis of a continuous overnight recording of EEG, electro-oculogram (EOG), and EMG in a normal 19-year-old man. The record was assessed in 30-sec epochs for the various sleep stages.

Principles and Practice of Sleep Medicine: 2nd Edition, 1994, by Kryger, Roth and Dement.

2) Parasomnias which include
   (a) arousal disorders
   (b) sleep-wake transition disorders
   (c) parasomnias usually associated with REM sleep
   (d) other parasomnias

3) Medical-psychiatric sleep disorders
   (a) associated with mental dis orders
   (b) associated with neurological disorders
   (c) associated with other medical disorders

4) Proposed sleep disorders

The two most common medical causes of daytime sleepiness in patients seen at sleep disorders centers are narcolepsy (which has a prevalence of about 50 cases per 100,000 of the population) and sleep apnea (SAS) (which is estimated to affect approximately 3-4% of the total population in the United States).[1] Sleep apnea is by far the commonest cause of excessive daytime sleepiness. Apnea is defined as the cessation of air flow. In the adult, apnea during sleep is usually the result of closure of the upper airway at the level of the naso- and/or oropharynx. Closure is brief, 10-20 seconds, but repetitive events, greater than 10-20 per hour of sleep, especially when accompanied by sleepiness, are of greater clinical concern than a lesser number (less than 5 per hour) of events unaccompanied by symptoms. A subset of this population presents to physicians for clinical evaluation most often on the basis of excessive daytime sleepiness, loud snoring and disrupted sleep. In the group, repetitive apneas and arousals result in disrupted and fragmented sleep; in some cases, moderate to severe nocturnal hypoxemia occurs. This presentation is called sleep apnea syndrome. Physiologic research suggests that fragmentation of sleep, nocturnal hypoxemia, and suppression of Stage III to IV of sleep interact and affect the patient's ability to stay alert and awake and to effectively perform complex tasks such as functioning in a driving situation. Patients may frequently report morning grogginess, headaches, and daytime fatigue. Other medical disorders, particularly those of cardiopulmonary origin with abnormalities in gas exchange, increase the severity of apneas or their consequences during sleep. Sedative drugs and alcohol increase apneic activity and reduce a patient's ability to arouse from sleep and/or end the apneic event; chronic sleep deprivation, such as that of shift workers or those unable to obtain sufficient sleep, aggravates the condition.

Degrees of subjective sleepiness may be defined as follows: Mild sleepiness describes infrequent sleep episodes present during times of rest or when little attention is required. Moderate sleepiness describes sleep episodes that occur on a regular basis during activities requiring some degree of attention. Severe sleepiness describes sleep episodes that are present daily and during activities that require sustained attention. Examples of such situations include eating, direct personal conversation, walking and physical activities, as well as operating motor vehicles. Severe sleepiness produces a marked impairment of social or occupational function.

Sleepiness may need to be quantified because subjective reports of sleepiness are imprecise compared with observer reports or tests of sleepiness. Typically, the severity of sleepiness is unappreciated by the patient; reports by patients and their spouses regarding the former falling asleep when reading or watching television have a 72% agreement owing to an underestimation by the patient of the presence of sleepiness.[2] Sleepiness may be denied by a patient because of

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lack of awareness of risk, embarrassment, or concern regarding punitive actions, such as loss of occupation.

Subjective rating scales, such as the Epworth sleepiness scale,[3] have been developed. The Epworth sleepiness scale has demonstrated internal validity in small numbers of subjects. The multiple sleep latency test is an electrophysiologic test which consists of a series of four or five standardized nap opportunities during the daytime where the time to sleep onset (sleep onset latency) is measured. In addition, the occurrence of rapid eye movement sleep during these nap samples is recorded if present. The sleep onset latency is used as a measure of daytime sleepiness. The multiple sleep latency test is more attractive than other measures because it is currently the only electrophysiologic test that has been validated to be correlated with different degrees of sleepiness. Thus far, studies have not been able to demonstrate a clear association between sleep onset latency on the multiple sleep latency test and the occurrence of reported automobile accidents.

The Problem of the Sleepy Driver

More than 50,000 deaths occur each year in the US from motor vehicle accidents. Approximately 13% of these may be due to falling asleep at the wheel.[4,5] Sleepiness without actually falling asleep may lead to additional accidents because of impaired vigilance and driving errors. In susceptible persons, falling asleep and excessive sleepiness are most likely to occur during long-distance driving in monotonous surroundings. Sleep deprivation, shift work schedules, circadian variations in alertness, medical conditions, alcohol use, and medications all can contribute to sleepiness and falling asleep while driving. Complete sleep deprivation for just one night leads to an increase in sleepiness and a marked reduction in sleep latency,[6] whereas partial sleep deprivation, or insufficient sleep, induces a more gradual, but just as severe sleepiness. In persons who customarily sleep at night and are awake during the day, alertness reaches a nadir at about 3:00 a.m. with a lesser trough in mid afternoon. In a study of locomotive drivers, electroencephalographic and electrooculographic changes consistent with drowsiness occurred much more frequently while driving a train at night than during the day. When insufficient sleep is combined with a shift in schedule, the consequent sleepiness can be even more severe.[7]

Despite the attractions of objective tests and questionnaires, no current studies have directly linked test outcomes alone with foreseeable driving risk in the general population. On the other hand, several recent reviews of automobile accident rates among patients with sleep apnea syndrome suggest that such patients have higher automobile accident rates than other drivers.[8-14] Although the association of sleep apnea syndrome and automobile accidents is high, the specific factors contributing to these accidents remain obscure. No specific single test or clinical symptom seems to have a high correlation with the accident figures. George, et al. (1987) strongly recommend that patients diagnosed with a sleep apnea syndrome with excessive daytime sleepiness should not be allowed to drive until they have been treated. The multiple sleep latency test was recommended as an essential test to establish the presence of daytime sleepiness and its correction recommended as a prerequisite for restoration of driving privileges.

In studies of narcoleptics, 40-48% reported falling asleep at the wheel and 25% had accidents due to falling asleep.[15,16] The study by Aldrich (1989) supported the results of previous studies that had shown a high frequency of accidents in narcoleptics and patients with sleep apnea.[8,15] His data also suggest that patients with excessive daytime sleepiness are at increased risk of sleep related motor vehicle accidents. Findley, et al.[17] found that patients with severe sleep apnea had more frequent accidents than patients with mild sleep apnea. Although the proportion of apneics with sleep-related accidents was lower than that of narcoleptics in Aldrich's study, they accounted for more sleep-related accidents because of their greater numbers. In both narcolepsy and sleep apnea, Aldrich did not find evidence by multiple sleep latency tests that those who have had accidents are more sleepy than those who have not. These findings suggest that sleepiness is not the only factor that contributes to sleep related accidents. George, et al. in their study, however, suggest that multiple sleep latency tests might be helpful in determining whether or not a patient should be allowed to drive.

Among patients with sleep apnea, risk for impaired driving is highest among those with both severe excessive daytime sleepiness and historic evidence of a motor vehicle crash. The level of apneic activity by itself is not a factor that increases risk. Automobile crashes are the third leading cause of death in the US with 40,000-50,000 people killed in approximately 2 million accidents each year.[18,19] The number of crashes and severity of injury by distance driven are highest in young drivers and in those over the age of 65.[20,21] The two most recognized factors are speeding and alcohol; however, inattentiveness, fatigue, and sleepiness are primary or contributing factors.[22] Sleepiness in particular has been documented to occur as a consequence of human conditions as well as of a variety of medical dis-

orders. Sleepiness is linked to insufficient sleep, often resulting from shift work or poor sleep hygiene or medical disorders causing excessive daytime sleepiness such as sleep apnea syndrome.[23]

Stoohs, et al. (1994) reporting on commercial long-haul truck drivers stated that truck drivers identified with sleep-disordered breathing had a twofold higher accident rate per mile than drivers without sleep disordered breathing. Accident frequency was not dependent on the severity of the sleep related breathing disorder. Obese drivers with a body mass index of more than 30 kg./m2 also presented a twofold higher accident rate than non-obese drivers. They concluded that a complaint of excessive daytime sleepiness was related to a significant higher automotive accident rate in long-haul commercial drivers. Sleep disordered breathing with hypoxemia and obesity were risk factors for automotive accidents.[24,25]

The National Highway Transportation Safety Administration (NHTSA) reports that the overall US drowsy driver crash problem in terms of absolute numbers of crashes and associated injuries and fatalities predominantly affects passenger vehicles and drivers.[26] Large trucks have a lower rate of involvement in drowsy driver crashes per vehicle mile traveled than cars. When considering the drowsy driver crash risk from the perspective of an individual vehicle, the probability of a fatality or the likelihood of a crash, the risk is much greater for large trucks. Due to the high mileage exposure and long operational life, large trucks have the highest likelihood of involvement in fatigue related crashes over the lifetime of the vehicle.[27]

The potential for long and possible erratic work hours places large-truck drivers at greater risk of fatigue than most passenger vehicle drivers. Such concern is primarily focused on drivers of combination-unit trucks (tractor trailers) rather than large single unit trucks because drivers of single unit vehicles tend to have more regular driving schedules and shorter, more local routes.

To reduce the likelihood of fatigue-related crashes, the Department of Transportation (DOT) restricts the duty hours of large truck drivers. Regulations contained in Title 49 of the Code of Federal Regulations (CFR) specified that no truck driver is permitted to operate a motor vehicle while the driver's ability or alertness is impaired or is likely to become impaired through fatigue (49 CFR 392.3). Federal regulations stipulate that than 10 hours following eight for any period after having individuals may neither drive more consecutive hours off duty nor drive been on duty for 15 hours following eight consecutive hours off duty (49 CFR 395). Drivers may accumulate their eight hours of rest during two periods in a trucker's sleep berth. Examples of on duty time include waiting time, inspection time and time spent loading or unloading trucks; it does not include time spent in a sleeper berth. Regulations also specify limits for weekly working hours. Federal regulations require truck drivers to maintain records of on duty, off duty and resting status for each 24-hour period using specified grid sheets or on board recording devices. Making false reports or failing to keep records is illegal. If drivers do not follow federal on duty laws, inspectors or police may declare them "out of service."

In 1995, the NTSB (National Transportation Safety Board) proposed changes to 49 CFR 395.2a These include revising 49 CFR 395.1 to require sufficient rest provisions to enable drivers to obtain at least eight continuous hours of sleep after driving 10 hours or being on duty for 15 hours; eliminating the provision allowing drivers with sleeper berths to accumulate eight hours of off duty time in two separate periods; examining truck driver pay compensation to determine if there is any effect on hours-of-service violations, accidents, or fatigue; and amending 49 CFR 392 and 395 to prohibit employers, shippers, receivers, brokers or drivers from accepting and scheduling shipments which would require drivers to exceed the hours of service regulations in order to meet delivery deadlines. The NTSB also recommends the use of on board recording devices to preclude drivers' use of dual logs to evade federal driving regulations.

Existing regulations may be inadequate for ensuring highway safety and minimizing truck driver fatigue. Evidence suggests that from 50%-90% of truck drivers violate laws governing the number of hours they are permitted to drive.[29]

In a recent study of 113 single vehicle large truck crashes, the NTSB determined from driver interviews that 48 of the 73 (67%) drivers with irregular schedules were involved in fatigue-related crashes compared to 13 of 34 (38%) drivers with regular schedules.[28] The most important factors in predicting fatigue related crash were the duration of a driver's last sleep period, the total hours of sleep obtained during the 24 hours prior to the crash, and fragmented sleep patterns. The NTSB concluded that Federal Hours of Service Regulations do not provide truck drivers with the opportunity to obtain adequate sleep.

Lastly, in a recent study,[30] the results demonstrate that patients with SAS had a higher ratio of self-reported motor vehicle accidents than those without SAS and that the characteristics of falling asleep at inappropriate times and driving past destinations were two good indicators of probability of having a motor vehicle accident. Since

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sleep apnea is a very treatable condition, it is speculated that these risk factors can be reduced considerably with treatment.

In 1994, a report was published for the National Commission on Sleep Disorders Research on the cost of sleep-related accidents.[31] The report estimated that between 41.6% of total and 36.1% of fatal motor vehicle accidents and 54% of total motor vehicle accidents were caused by sleepiness. These percentages were extended to other categories of work-related, home based and public accidents. On the basis of these estimates, the total cost of accidents occurring in 1988 was estimated to be 43.1 and 59.02 billion dollars. The estimates of accidents related to sleepiness are exclusively derived from a table of the hourly distribution of the 1988 fatal and total motor vehicle accidents reported by the National Safety Council.

Summary

There is wide consensus that drowsiness and sleep during driving put the driver and others at high risk for motor vehicle crashes. A large percentage of both private automobile and commercial vehicle crashes and crash fatalities are associated with the sleepy driver each year. Sleepiness in persons without sleep disorders may occur from potentially preventable causes such as sleep deprivation, drinking alcohol or taking sedative medications. Sleepiness also occurs uncontrollably in persons with certain sleep disorders. It is important, therefore, for persons to have a diagnosis of a sleep disorder, objectively confirmed with an MSLT, to be considered for restriction of driving privileges. The MSLT serves as a marker for the sleep disorder and also as evidence of effective treatment. While sleepiness is widespread, this regulation addresses only the highest risk group for attention. Proposed guidelines for sleep related disorders and driving in Wisconsin are presented with this background in mind.

Proposed Guidelines for Sleep-Related Disorders

Excessive daytime sleepiness (EDS) with established diagnosis of sleep disorders.

Examples:

- Sleep apnea
- Narcolepsy
- Idiopathic CNS hypersomnolence
- Other causes

EDS diagnosis to be confirmed with abnormal multiple sleep latency test: Mean sleep onset latency of less than five minutes.

Rx with proof of recovery; i.e., normal MSLT.

Recommend license suspension until recovery documented by patient's physician and Department of Transportation (DOT), for both commercial and private vehicles.

References

1. Guilleminault, C., Van Den Hoed, J., Mitler, M. Clinical Overview of the Sleep Apnea Syndrome. In: Guilleminault, C., Dement, W., editors. Sleep Apnea Syndrome. New York: A.R. Liss, 1978:1-12.
2. Walsleben, J.A. The Measurement of Daytime Wakefulness. *Chest*, 1992;101:890-891.
3. Johns, M.W. Reliability in Factor Analysis of the Epworth Sleepiness Scale. *Sleep*, 1992;15:376-381.
4. Aldrich, Michael S., M.D. Automobile Accidents in Patients with Sleep Disorders. *Sleep* 12(6):487-494, 1989.
5. Bartel, E.C., Kushak Ciosiu, O. Narcolepsy: A Possible Cause of Automobile Accidents. Lahey Clinic Foundation Bulletin 1969(14):21-26.
6. Dement, W.C., Carskadon, M.A., Richardson, G. Excessive Daytime Sleepiness in the Sleep Apnea Syndrome, in: Guilleminault, C., Dement, W., editors. Sleep Apnea Syndromes. New York: A.R. Liss, 1978:23-46.
7. Torevall, L., Akerstedt, T. Sleepiness on the Job: Continuously Measured EEG Changes in Train Drivers. *EEG Clin Neurophysiol.*, 1978;502-511.
8. Findley, L.J., Unverzagt, N.E., Suratt, P.M. Automobile Accidents Involving Patients with Obstructive Sleep Apnea. *American Review of Respiratory Diseases*, 1988, 138:337-340.
9. Stradling, J.R. Obstructive Sleep Apnea in Driving. *BMJ*, 1989; 298(6678):904-905.
10. Findley, L., Levinson, M., Bonnie, R. Driving Performance and Automobile Accidents in Patients with Sleep Apneas. *Clinical Chest Medicine*, 1992;13(3):427-435.
11. George, C., Nickerson, P., Millar, T., Kryger, M. Sleep Apnea Patients Have More Automobile Accidents (letter). *Lancet*, 1987;8556:447.
12. Cassell, W., Ploch, T., Peter, J.H., Von Wichert, P. Risk of Accidents in Patients with Nocturnal Respiration Disorders. *Pneumonologi*, 1991;45(1):271-275.
13. Findley, L.J. Automobile Driving and Sleep Apnea. *Sleep and Respiration*, 1990; 345:337-345.
14. Findley, L.J., Weiss, J.W., Jabour, E.R. Drivers with Untreated Sleep Apnea. A Cause of Death and Serious Injury. *Archives of Internal Medicine*, 1991;151:1451-1452.
15. Broughton, R., Ghanem, Q. The Impact of Compound Narcolepsy on the Life of the Patient. In: Guilleminault, C. et al., editors. Narcolepsy. New York: Spectrum Publications, 1976:201-220.
16. Parkes, J.D. The Sleepy Driver. In: Godwin-Austen, R.B., Espir. MLE, editors. Driving in Epilepsy and Other Causes of Impaired Consciousness. London World Society of Medicine, 1983:25.
17. Findley, L.J., Fabrizio, M., Thommi, G., Suratt, P.M. Severity of Sleep Apnea in Automobile Crashes. *New England Journal of Medicine*, 1989;320:868-869.
18. US Bureau of the Census Statistical Abstract of the United States: 1990, Washington, DC: US Department of Commerce, 1990;79:606.
19. Sleep Apnea, Sleepiness, and Driving Risk. *American Journal of Respi-*

ratory Critical Care Medicine, 150:1463-1473, 1994.

20. Retchin, S.M., Anapolle, J. An Overview of the Older Driver. In: *Clinical Geriatric Medicine*, 1993;9:279-297.
21. Williams, A.F., Carsten, O. Driver Age and Crash Involvement. *American Journal of Public Health*, 1989;79:326327.
22. Mitler, M., Carskadon, M., Czeisler, C., Dement, W., Dinges, D., Graeber, R. Catastrophes, Sleep and Public Policy: Consensus Report. Sleep, 1988; 11:100-109.
23. Waller, J.A. Health Status and Motor Vehicle Crashes. *New England Journal of Medicine*, 1991;324:54-55.
24. Stoohs, R.A., Guilleminault, C., Itoi, A., and Dement, W.C. Traffic Accidents in Commercial Long-Haul Truck Drivers: The Influence of Sleep-Disordered Breathing and Obesity. Sleep, 17(7):619-623, 1994.
25. Stoohs, R.A., gingham, L., Itoi, A., Guilleminault, C., and Dement, W. Sleep and Sleep Disordered Breathing in Commercial Long-Haul Truck Drivers. *Chest*, 107:1275-1282, 1995.
26. Knipling, R.R., Wang, J.S. Crashes and Fatalities Related to Driver Drowsiness/Fatigue. Washington, DC: U.S. Department of Transportation, Office of Crash Avoidance Research; November 1994. Research note.
27. Knipling, R.R., Wang, J.S. Revised Estimates of the U.S. Drowsy Driver Crash Problem Size Based on General Estimates System Case Reviews. Presented at the Annual Meeting of the Association for the Advancement of Automotive Medicine. Chicago, Illinois; October 18, 1995.
28. National Transportation Safety Board: Factors that Affect Fatigue and Heavy Truck Accidents. Vol. 1. Safety Study NTSB/SS-95-01. Washington, DC: National Transportation Safety Board; 1995.
29. Braver, E.R., Preusser, C.S., Preusser, D.F., Baum, H.M., Beilock, R., Ulmer, R. Long Hours and Fatigue: A Survey of Tractor Trailer Drivers. *Journal of Public Health Policy*. 1992;13:341
30. Hahn Wu, M.S.Ph., and Frisca Yan-Go, M.D. Self-Reported Automobile Accidents Involving Patients with Obstructive Sleep Apnea. *Neurology*, 46:1254-1257, May 1996.
31. Leger, H. *Sleep*, 1994;17:84-93.❖

Public Health

Prostate Cancer Mortality Increases In Wisconsin, 1979-1994

Dirk Haselow; Patrick Remington, MD, MPH, Madison

Introduction

Prostate cancer is the most frequently-diagnosed malignancy in men in Wisconsin and in the US, and is second only to lung cancer as a cause of cancer deaths.[1,2] In Wisconsin the incidence of prostate cancer has increased 230% since 1980.[1] This increase has been attributed mostly to increased detection from the use of prostate specific antigen (PSA) as a screening test.[4] However, the PSA test is unlikely to completely explain the rise in incidence, as rates were increasing well before PSA testing was approved by the FDA in 1985.[4,6]

Regardless of the reasons for the increasing incidence of prostate cancer, it is important to closely monitor trends in prostate cancer mortality. At least one study showed that mortality from prostate cancer in older, metropolitan, white men has remained surprisingly stable, demonstrating little or no correlation between mortality and incidence rates.[4] This report analyzes trends in prostate cancer in Wisconsin and the US, by age and race. This information will be helpful in assessing trends in the prevention, detection, and treatment of prostate cancer in the population.

Methods

A cross-sectional analysis of prostate cancer mortality from 1979-1994 was undertaken, using the CDC WONDER system (Wide-ranging Online Data for Epidemiology Research). This system permits the analyst to access underlying cause mortality data from 1979 to 1994, using a toll-free telephone number and free computer software. The outcomes of interest were crude and age-adjusted death rates with age, race, region, and year as exposure variables. All rates are expressed per 100,000 men, and the 1990 US census population was used for age adjustment.

Results

The age-adjusted mortality rate of prostate cancer in Wisconsin increased 26% over the past 12 years, from 23 deaths per 100,000 in 1979-81 to 29 deaths per 100,000 in 1992-1994 (see Table). The corresponding increase for the US population over the same time period was half of that number, only 13%. While mortality increased in both blacks and whites, and in all age groups age 55 and older, mortality actually decreased in men younger than 55.

These changes are displayed graphically in the figure. Because of year-to-year fluctuations in the number of deaths, a three-year moving average was used. Mortality among blacks is roughly twice that of whites both in Wisconsin and the US, and appears to be in

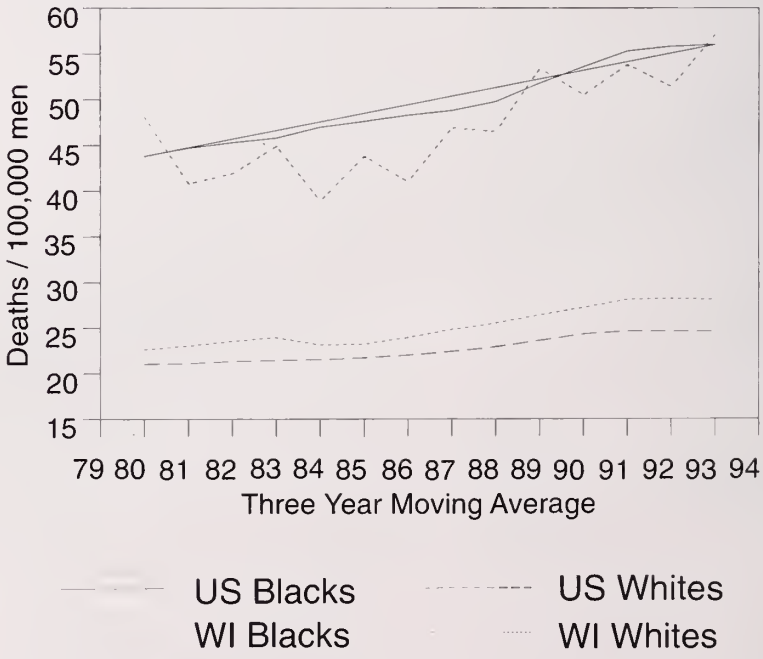

Figure: Prostate cancer mortality for WI and the US by race and year. Plot shows three-year moving averages calculated from data from years 1979-94, age-adjusted for 1990 US census population.

Mr Haselow is a graduate student in the Department of Preventive Medicine, University of Wisconsin, Madison. This study was conducted as a project in a Chronic Disease Epidemiology class in the Department of Preventive Medicine. Dr Remington is the State Epidemiologist for Chronic Disease, Wisconsin Division of Health, Madison, WI. Address reprint requests to Dr Patrick Remington, Wisconsin Division of Health, 1414 East Washington Ave, Madison, WI, 53703.

Table: Prostate cancer mortality trends, Wisconsin and the U.S., 1979-1994.

		United States			Wisconsin		
		1979-81	1992-94	Change	1979-81	1992-94	Change
Race	White *	21	24	+14%	23	28	+22%
	Black *	44	56	+27%	48	57	+18%
Age	<45 **	0.02	0.02	0%	0.03	0.02	-33%
	45-54	2.8	2.4	-14%	2.3	1.9	-17%
	55-64	22	25	+14%	21	24	+14%
	65-74	106	117	+10%	110	128	+16%
	75-84	310	353	+14%	312	382	+22%
	85+	597	821	+38%	597	911	+53%
All	Crude	21	28	+33%	23	33	+44%
	Age Adjusted *	23	26	+13%	23	29	+26%

Note: * Rates are adjusted for the 1990 US census population.
** Mortality rates for ages less than 45 may not be valid as they reflect small numbers.

creasing at a faster rate than among whites.

Black men in Wisconsin appear to have about the same trend in prostate cancer mortality, compared with the US. The rates among Wisconsin blacks appear to fluctuate because of the relatively small number of deaths (9-30 deaths/year). White men in Wisconsin appear to have a consistently higher rate of prostate cancer mortality as compared to US whites, although the trends are similar.

Comments

Mortality from prostate cancer has increased steadily both in Wisconsin and nationwide since 1980. Although prostate cancer is an uncommon cause of death among men under the age of 55, resulting in about 360 deaths per year nationally, the mortality rates among these younger men appear to be declining. However, the rates among older men -- especially those 85 years of age and older -- are increasing. In addition, the death rate among blacks -- already over two times higher than whites in 1979-81 -- is increasing at a faster rate compared with whites. Although the reasons for these increases are unknown, there are several possible explanations.

First, the true incidence of prostate cancer could be increasing over time, resulting in an increase in the subsequent prostate cancer mortality rate. Incidence rates were increasing prior to the widespread use of PSA for screening.[4,6] Any recent increase in incidence would be obscured by the increasing use of PSA. Unfortunately, it is not possible at the present time to assess trends in the environmental or behavioral risk factors for prostate cancer, because these risk factors are poorly defined, or unknown.[6]

A second possible explanation is that the increase in mortality has resulted simply from an increase in the listing of prostate cancer as an underlying cause of death on the death certificate. For example, a death in 1994 from pneumonia in an older man might have been attributed to prostate cancer, if that man had been recently diagnosed and treated for prostate cancer. A decade earlier, that same death would have been attributed to pneumonia alone. The relatively greater increase in prostate cancer mortality among men over the age of 85 supports this hypothesis.

It is possible that the prostate cancer mortality rate has increased because of an increase in deaths related to the treatment of the disease. One treatment for prostate cancer, radical prostatectomy, has increased markedly in the past ten years.[7] Several studies report that in those men who had their prostate removed, survival has been greatly enhanced.[8-10] Critics believe the favorable results may just reflect the higher proportion of men with early stage cancer (who have a better prognosis) being detected and treated.[4] Even a relatively few number of treatment-related deaths among men who might not have otherwise had their prostate cancer diagnosed, might negate the possible benefit from the earlier detection of the disease. This would be especially true among older men, who are at greater risk from treatment-related complications

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and who are less likely to benefit from early detection.

The National Cancer Institute (NCI) recently reported that prostate cancer mortality declined by 6.3% between 1991 and 1995.[11] The rate for men under age 75 fell 7.4%, while the rate for men 75 and older fell 3.8%. According to the NCI, causes of this recent trend are largely unclear, and additional time will be required to determine whether the decline continues.[11]

The increasing mortality rate from prostate cancer over the past decade -- whatever the reason -- is a cause for concern. There are no public health recommendations for the prevention of prostate cancer. Not only are risk factors poorly described, screening has not been conclusively shown to reduce mortality,[2] and the efficacy of one of the most common treatments, radical prostatectomy, has come into question. With many unknowns regarding both screening and treatment, one can only hope that further research into the basic disease process will provide some answers.

References

1. Cancer Reporting System, Center for Health Statistics, Wisconsin Division of Health, Cancer in Wisconsin 1994. Wisconsin Division of Health, 1996.
2. Hostetler, R.M., Mandel, I.G., Marshburn, J. Prostate Cancer Screening. *Medical Clinics of North America*, 1996; 80(1):83-98.
3. Centers for Disease Control. Trends in Prostate Cancer-United States, 1980-1988. *MMWR*. 1992; 41:401-4.
4. Lu-Jao, G.L., Greenberg, E.R. Changes in Prostate Cancer Incidence and Treatment in USA. *Lancet*. 1994; 343:251-54.
5. Jacobsen, S.J., Katusic, S.K., Bergstralh, E.J., et al. Incidence of Prostate Cancer Diagnosis in the Eras Before and After Serum Prostate-Specific Antigen Testing. *JAMA*, 1995; 274(18):1445-9.
6. Jochimsen, E.M., Remington, P.L., Phillips, J.L. Public Health: Increasing Incidence of Prostate Cancer in Wisconsin, 1980-1990. *Wisconsin Medical Journal*, September 1992:537-8.
7. Lu-Yao, G.L., McLerran, D., Wasson, J., et al. An Assessment of Radical Prostatectomy: Time Trends, Geographic Variation, and Outcomes. *JAMA*, 1993;269:2633-6.
8. Walsh, P., Epstein, J., Lowe, F. Potency Following Radical Prostatectomy with Wide Unilateral Excision of Neurovascular Bundle. *J Urol*, 1987;138:823-7.
9. Gibbons, R.P. Total Prostatectomy for Clinically Localized Prostate Cancer: Longterm Surgical Results and Current Morbidity. *National Cancer Institute Monogr*,1988;7:123-6.
10. Lepor, H., Walsh, P.C. Long-term Results of Radical Prostatectomy in Clinically Localized Prostate Cancer: Experience at the Johns Hopkins Hospital. *National Cancer Institute Monogr*, 1988;7:116-22.
11. National Cancer Institute. Cancer death rate declined for the first time ever in the 1990s. November 14, 1996 press release. ❖

What's New In...
Medical Physics

Paul M. DeLuca, Jr., PhD; T. Rockwell Mackie, PhD; C. A. Mistretta, PhD; and James A. Sorenson, PhD, Madison

Introduction

Technology continues to greatly impact medical diagnosis and care. Some of these advances derive from the application of physics principles and techniques. We describe three new and exciting advances in this report. A particularly noteworthy aspect of all of these efforts is the high level of collaboration between clinical and basic scientists, especially in the Departments of Radiology and Medical Physics. Such closely-coupled efforts have ensured rapid and efficient advances and the movement into the most relevant clinical areas. For each mini-report we indicate the major contributor's to the work. A suggested reading list is appended to the article.

Tomotherapy - A New Paradigm in Radiation Therapy?[1]

Unfortunately about 120,000 people in the US die each year from a lack of local tumor control without evidence of distant metastases -- a number of deaths which exceeds that for automobile accidents and all other accidental deaths each year. Control of local disease is a fundamental challenge to radiation therapy which has slowly yielded incremental progress over the last decade. An obvious conclusion is that many of these failures could become sucesses if a larger dose of radiation could be administered to the tumor while keeping the dose to normal tissue similar to current practice. We are presently developing a novel technique for radiation delivery that will accomplish the desired task by irradiation from many directions in a unique and highly controlled manner. This "tomotherapeutic" treatment is analogous to conventional computerized tomography (CT). A compact electron linear accelerator is configured in a CT-like ring gantry. High-energy photon (megavoltage) radiation is delivered with a narrow fan beam in a spiral pattern, with individual ray weights modulated by a multileaf collimator system. An additional advantage accrues from using the same gantry to house a diagnostic CT unit to provide position verification, along with a mega-voltage detector to provide dosimetric verification and a beam stop to reduce room shielding costs. In essence, radiation therapy is delivered and verified at the same time that the morphology is estimated. Even without dose escalation to the tumor, treatment control and verifi-

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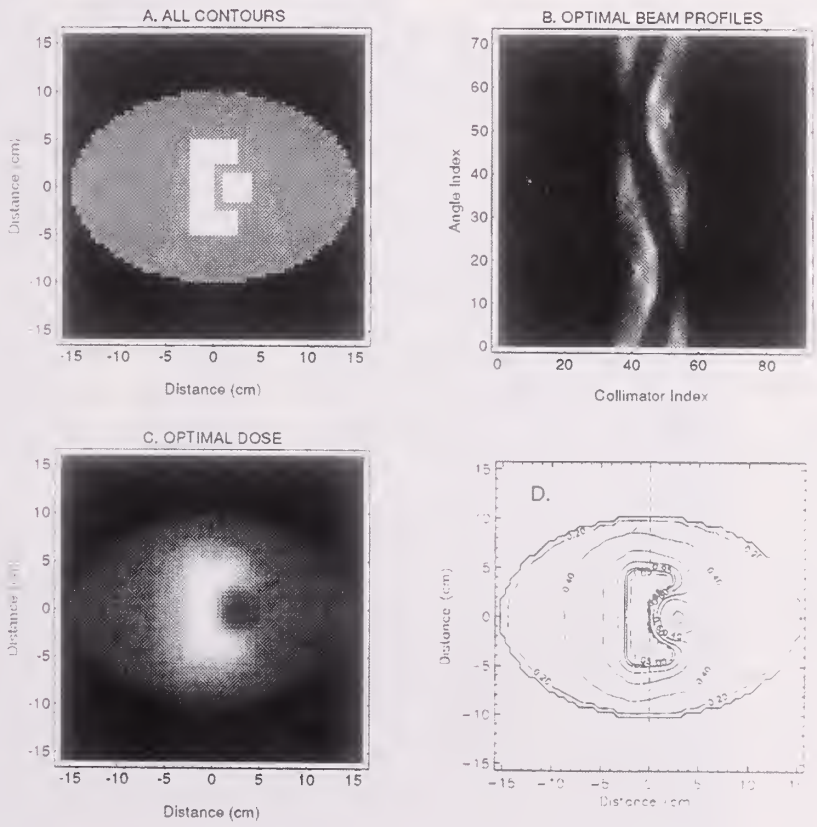

Figure 1. Illustration of the dose conformation possible using tomotherapy. The target volume (C-shaped) and sensitive structure (square) are shown in A. Optimal beam profiles are shown in B using a sinogram image. Each pencil beam index corresponds to an individual collimator leaf. The brighter pixels reflect greater open time for the collimator at a given gantry angle. A gray-scale image and isodose curve for the resulting dose distribution are shown in C and D, respectively.

Drs DeLuca, Mackie, Mistretta, and Sorenson are associated with the Departments of Medical Physics and Human Oncology at the University of Wisconsin-Madison.

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cation will now approach levels not possible with conventional apparatus. Figure 1 illustrates some of the superb dose delivery capabilities of this system.

Tomotherapy synthesizes several novel components: 1) a temporally-modulated multileaf collimator system, 2) a CT-like ring gantry that lends itself to tomographic verification, and 3) a computerized dose planning optimization system that is based on image reconstruction mathematics. Our temporally-modulated multileaf collimator system would consist of multiple focused leaves as shown in Figure 2.[2] The fan beam would be temporally modulated using actuators to drive the leaves in and out of the field. The intensity of radiation through a portion of the beam (a ray weight) is proportional to the length of time a leaf is out of the beam.

Tomotherapy might be as important to radiation therapy as the advent of the CT scanner was to radiology because it can provide a solution to several long-standing problems of radiation therapy. Tomotherapy achieves this by simultaneously changing the nature of beams being delivered (non-uniform rather than uniform), changing the configuration of treatment (using a dynamic fan beam instead of static broad beams), and using "inverse planning" (given the desired dose distribution one computes the beam of configuration) rather than conventional planning (guess the beam configurations and compute the resulting dose distribution).

We see a unique opportunity for tomotherapy in the control of cancer and the reducation of complications. Dose escalation should lead to increased local tumor control and survival (Suit and Westgate 1986), if the radiobiological effect to radiosensitive normal tissue is not increased or even simultaneously lowered (Thames, et al. 1992).

Tomotherapy could provide unprecendented quantity and quality of radiobiological information that would be used to improve the science of radiation therapy. It would be possible for the first time to reliably determine the dose distribution that was actually delivered in three dimensions. When correlated with treatment outcomes, this information could be used to determine accurate dose response curves for normal and tumor tissue.

Summary

We expect that the advent of tomotherapy will change the process of radiotherapy in ways similar to CT's impact on radiology. Likewise, the capabilities, convenience, and cost advantage of tomotherapy would be such that it will be the method of choice for the vast majority of sites within a decade of its introduction.

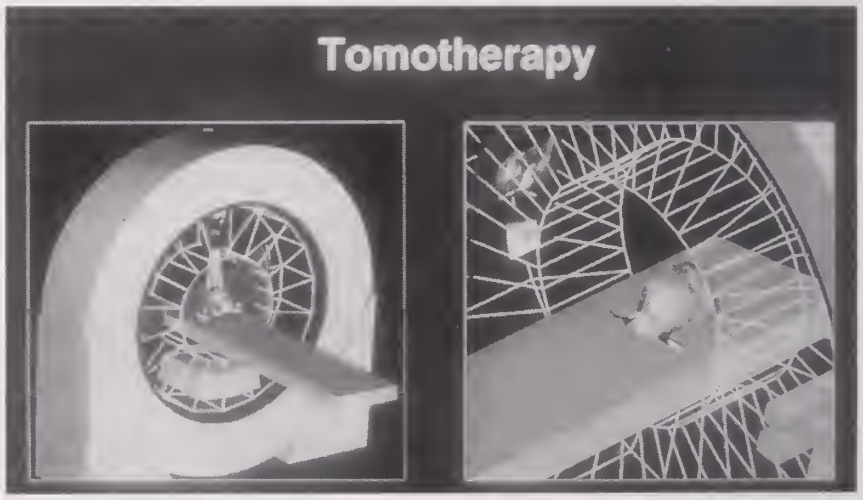

Figure 2. Delivery methodology for tomotherapy. On the left, a temporally-modulated collimator system controls the radiation through a fan beam. On the right is a close up. The fan beam is delivered in a spiral pattern with the gantry rotating simultaneously with the couch motion.

Figure 3. Selected time frame images for a series of 27 such images.

3D Time-Resolved Contrast-Enhanced Magnetic Resonance Angiography[3]

Recently, University of Wisconsin investigators developed a magnetic resonance analog of Digital Subtraction Angiography (DSA), an x-ray technique which has become the standard method for angiography and has provided the second largest all-time patent royalty income for the University. The new technique, labelled 3D MR-DSA, provides a series of 3D image data sets following intravenous injection of a relatively harmless gadolinium MR contrast material. 3D MR-DSA is the latest in a series of developments in angiography which began shortly after the discovery of x-rays by Roentgen in 1895.

The first reported x-ray angiogram was obtained by Hascheck and Lindenthal on an amputated hand utilized chalk as a contrast material (a non-reimbursable procedure!). During the first two decades of the twentieth century, somewhat less invasive catheter techniques were used to deliver iodinated contrast material to the vessels of interest. In 1929 the concept of subtraction angiography was introduced. In this method images on films obtained before and after the introduction of contrast materials were photographically subtracted to produce images in which non-vascular tissues were removed, leaving a clear picture of the vessels.

In an attempt to reduce the degree of invasiveness of the angiographic procedure, investigators in 1939 explored the possibility of delivering contrast material with intravenous injections. This met with limited success due to the dilution of the contrast material as it passed from the venous to the arterial side. The arterial signals produced by the dilute contrast material were difficult to record on film. Image quality was also highly dependent on cardiac output.

The intravenous angiographic approach was abandoned until the 1970s when investigators began experimenting with electronic recording and computer processing of the intravenous angiograms. A real-time digital subtraction image processor was developed for this purpose by Professor Mistretta (University of Wisconsin-Madison Medical Physics and Radiology) and co-workers and has served as the model for present DSA systems. It was found that the use of

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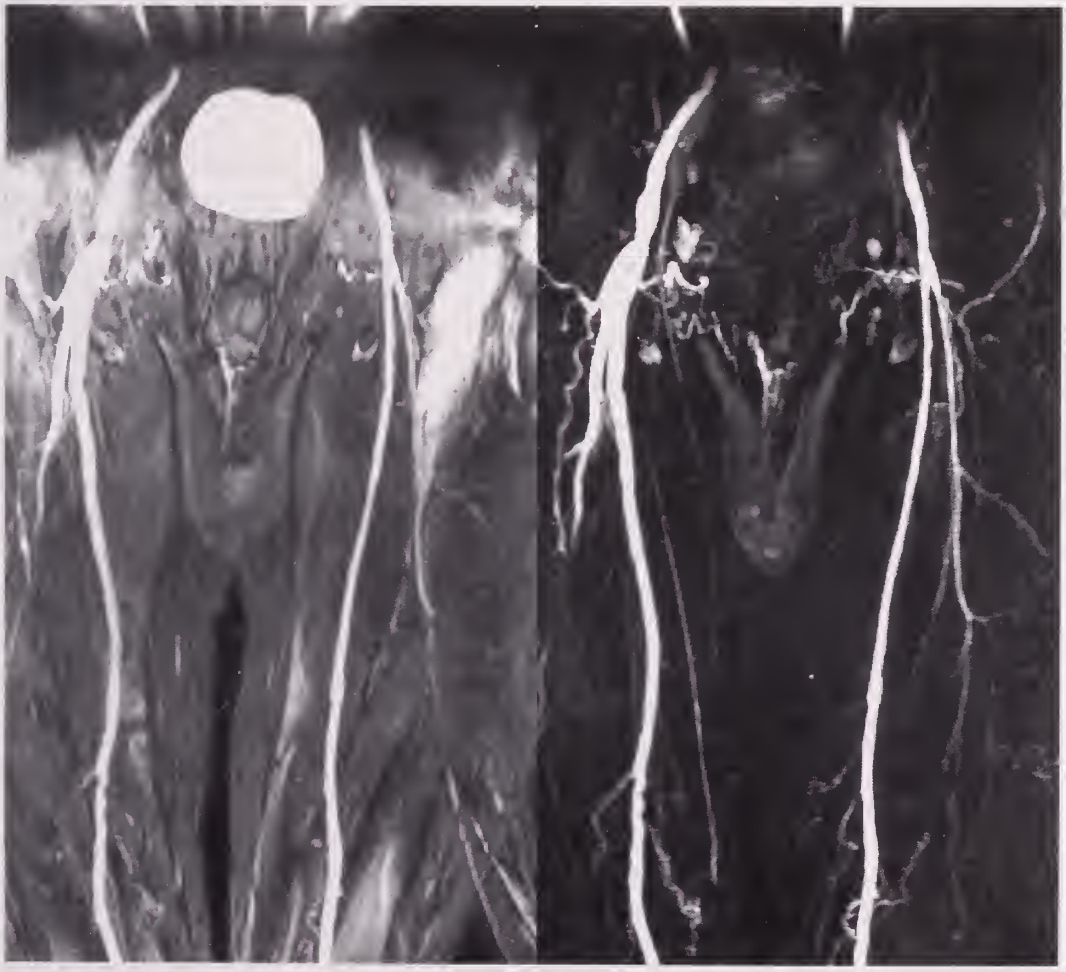

Figure 4. A subtraction image (left) which can be compared to the unsubtracted image (right).

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smaller arterial catheters used in conjunction with reduced amounts of iodine produced the best images at reduced risk relative to conventional film angiography. Except for the coronary vessels, where subtraction is difficult due to cardiac motion, DSA is the most common angiographic technique in use today.

Recently, computed tomography (CT) apparatus has been sped up through the introduction of Spiral CT, the invention of former University of Wisconsin-Madison Medical Physics graduate student Willi Kalender. Using Spiral CT, investigators have recently achieved promising angiographic results using intravenous iodine injections followed by Spiral CT scans. Computed tomographic angiography (CTA) image quality is improved relative to early attempts at intravenous angiography using DSA. But there are difficulties related to the timing of the data acquisition relative to the injection and the large amounts of contrast material required. Additionally, examination of multiple regions is difficult due to the contrast load.

During the past ten years, it has become possible through magnetic resonance imaging (MRI) techniques to obtain angiograms without the use of contrast material. These techniques rely on the motion of the blood and are completely non-invasive. Although the quality of magnetic resonance angiography (MRA) has improved steadily, there are still a number of limitations. One of these is that the severity of narrowings is routinely overestimated due to the effects of complex flow patterns following stenoses. An additional difficulty is the loss of signal for vessels which lie in the imaging plane and experience large numbers of signal-reducing radiofrequency pulses.

During the past year several investigators have had considerable success using contrast-enhanced MRA in which a single image is obtained following intravenous injection of gadolinium compounds. Gadolinium preserves post-stenotic signal and reduced the effects of signal loss induced by radiofrequency pulses. However, it is difficult to time the data acquisitions, which typically take 30 seconds, relative to the contrast injections. Improperly timed scans lead to serious image artifacts. An additional limitation of the technique is that it is difficult to image multiple sites because the contrast from the first injections lead to serious enhancement of undesirable background structures in subsequent scans.

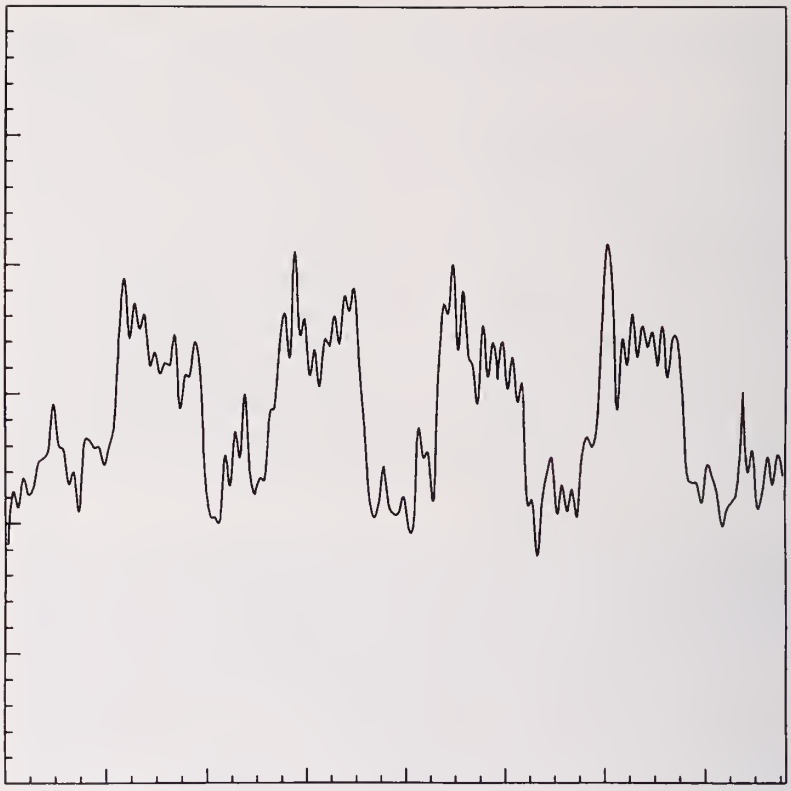

Figure 5. Signal levels in the region of the motor cortex from finger-tapping stimulus.

These limitations have been removed by the 3D MR-DSA technique recently developed by Dr Mistretta and co-investigators Drs Grist, Frayne, and Korosec. Using a novel combination and extension of previously published techniques, acquisition time for 3D data sets has been reduced from 30 seconds to 2-6 seconds, depending on the application. This reduction in scan time has made it possible to acquire a series of 3D data sets during the first passage of the gadolinium through the arterial system, thus removing timing uncertainties. Selected time frames from a series of 27 such images are shown in Figure 3.

The image time series also provides the opportunity for application of all of the image processing methods developed for x-ray DSA, most importantly image subtraction. An important consequence is that multiple injections can be used to image several sites. Subtraction removes the background produced by previously administered gadolinium. This is illustrated in Figure 4 where subtraction (right) permits visualization of arteries, which without subtraction (left) are obscured by muscle enhanced by a previous gadolinium injection.

The advantages of 3D MR-DSA

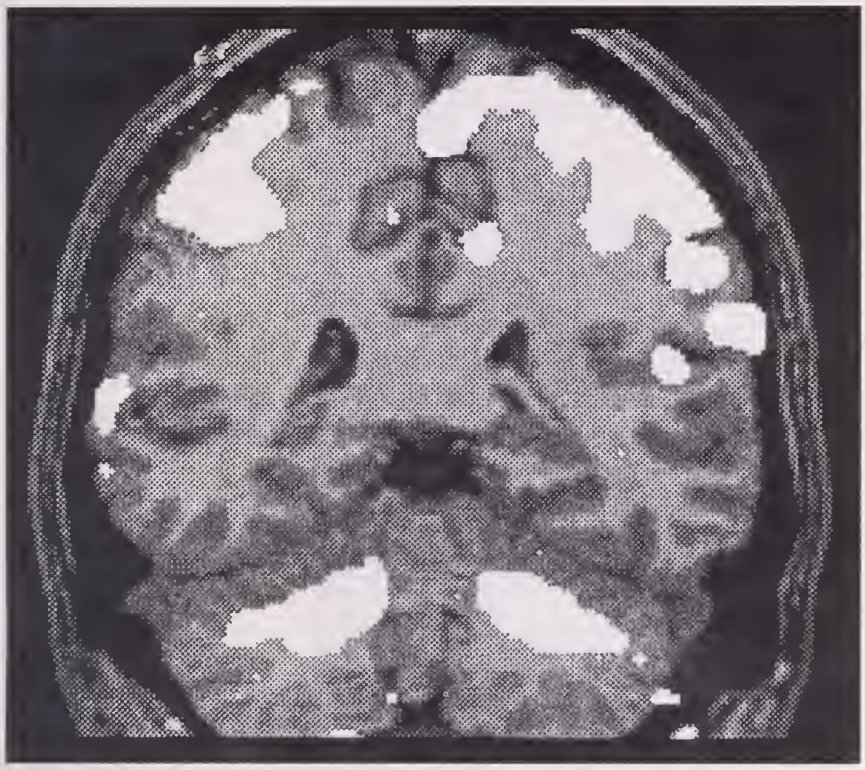

Figure 6. A brain image upon which a bright mask is rendered to show regions of activation.

may be summarized as follows:

1. It is less invasive than intra-arterial DSA.
2. Gadolinium is less toxic than the iodine used in DSA and CTA.
3. There is no ionizing radiation as in DSA and CTA.
4. Typical MR contrast data acquisition timing difficulties are removed.
5. Post stenotic MR signal is preserved.
6. MR Signal loss for in-plane and slowly flowing blood is reduced.
7. Subtraction permits examination of multiple sites with multiple injections.
8. 3D MR data permits reprojection of data to produce multi-angular views.

As of this writing, over 400 examinations have been performed at the University of Wisconsin-Madison. Image quality has been consistently excellent. Patents on the MR-DSA technique have been filed and efforts directed at commercial dissemination of the technique have begun.

Functional Magnetic Resonance Imaging[4]

Magnetic resonance imaging (MRI) has had a subsequential impact on diagnostic radiology, and on the practice of medicine in general, since its introduction into the commercial marketplace only a dozen or so years ago. Recent technological advances have further improved the quality of MR images and the range of its potential applications. One such advance, called echo-planar imaging (EPI), is capable of providing sub-second imaging times, and is now in use at the University of Wisconsin-Madison. A new class of MR imaging techniques called functional MRI (fMRI) has become practical with this technology. Basic scientists and physicians at the University of Wisconsin-Madison have been particularly interested in developing fMRI of the brain.

The goal of this application is to obtain images showing areas of the brain that are activated during performance of a sensory,motor, or cognitive task. One signature of activation is an increase in local blood flow to regions of the brain that are activated during the task, which in turn leads to small changes in the MR signal from those regions.

The first demonstration of this concept was reported about five years ago (Belliveau JW, et al., 1991). In these studies, subjects were given bolus injections of a gadolinium-based MR contrast agent and EPI images were acquired during an activation stimulus or task. The imaging study then was repeated while the subject was at rest. A subtraction of the task *vs.* rest series of images indicated a faint difference between those areas of the brain that received more blood flow during task performance than in uninvolved regions.

This finding alone was significant and would have lead to important clinical and research applications. However, it required injection of a relatively expensive MR contrast material and was somewhat invasive, which would have limited its widespread usage. This need was eliminated by an even more fascinating observation arising from basic research initiated over a decade earlier on the magnetic properties of blood (Thulborn KR, et al., 1982; Ogawa S et al., 1990). Specifically, the MR signal in the activated region of the brain from blood itself changes during performance of a task. The signal change is caused by a change in the oxygenation status of the hemoglobin, from oxygenated to deoxygenated, as it passes through the tissue. This mechanism of image contrast is called BOLD-contrast, for blood-oxygenation-level-dependent contrast.

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The underlying principle is somewhat paradoxical. Oxygenated blood is weakly magnetic, and produces a stronger MR signal (and therefore a brighter image) than de-oxygenated blood, which is strongly magnetic. When a region of the brain is activated, e.g., during performance of a task, it is perfused with an increased volume of blood in response to an increased demand for nutrients and oxygen. However, the additional blood provided exceeds the actual demands for oxygen (over-perfusion). Thus, the signal from activated tissues actually increases during task performance due to the increased concentration of oxygenated hemoglobin.

BOLD-contrast signal changes from activated brain tissue on a modern high-field (1.5 tesla) MR scanner are small under the best of conditions. These range from a few percent for relatively localized and strongly activating tasks, such as performance of a finger-tapping exercise, to a fraction of a percent for more distributed cognitive tasks, such as a memory task. Therefore, proper design of a functional MRI study (or paradigm) is critical for obtaining robust results. Usually, an fMRI study consists of obtaining a series of EPI images, perhaps 100 or so, at intervals of a second or two.

While the images are being acquired, the subject undergoes alternating cycles of task performance and rest. Each pixel in the image is then analyzed for the presence of signal changes during the task that are correlated with task performance. Mathematical post-processing algorithms are applied to the data from each pixel to correct for artifacts and to identify areas where signal changes are correlated with the stimulus task.

Figure 5 shows the signal level from a pixel located in a region of the motor cortex during on-off cycles of performance of a bilateral, sequential finger-tapping exercise. In addition to the alternating cycles of increased and decreased signal levels, there is an underlying drift in signal level, which may reflect long-term pooling of oxygenated blood. There also is a significant level of random noise in the signal.

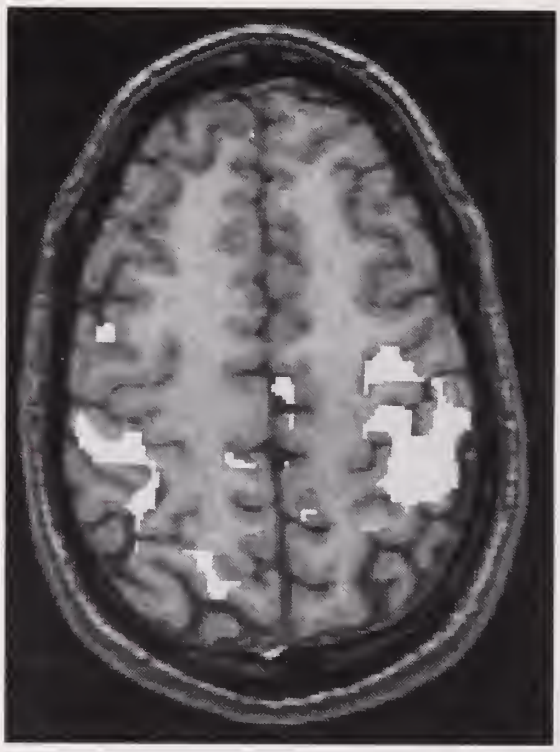

Figure 7. A brain image with various strongly correlated regions rendered.

Figure 6 shows an image of the brain, onto which has been rendered a bright "mask," showing those regions that were "activated," according to the post-processing analyses. These included the primary motor cortex, as well as cerebral peduncles and a region of the temporal lobe, which may also be activated in a complex finger-tapping exercise.

The results obtained by fMRI are similar to those obtained with positron emission tomography (PET) which used radioactively labeled glucose or oxygen. However, PET studies are relatively time consuming and invasive and involve the use of radioactive tracers. Functional MRI is completely non-invasive and involves no known long-term risks to the subject.

While EPI is now available as a commercial product, fMRI is not a turn-key operation and requires substantial in-house development for practical implementation. Researchers in the Department of Medical Physics have been developing data acquisition and image processing techniques to implement fMRI at the University of Wisconsin-Madison. This work also has involved collaborations with scientists at General Electric Medical Systems, Waukesha and Medical Advances, Inc., Milwaukee.

Several clinical and research applications are under investigation at the University of Wisconsin-Madison.

One application being explored, in collaboration with Patrick Turski of the Department of Radiology, is the use of fMRI for pre-surgical localization of "eloquent" regions of

the brain in patients with tumors or AVM's (artero-venous malformations).

Another application, in collaboration with Drs Richard Davidson and Ned Kalin of the Departments of Psychiatry and Psychology, is for studies of psychiatric disorders, such as depression. Research also is underway to apply fMRI to children with cognitive disorders. The long-range potential for fMRI in children is significant because of its non-invasive, low-risk nature.

Two other areas of collaboration with the Department of Neurology involve studies of patients with Amyotrophic Lateral Sclerosis (ALS), with Drs Ben Brooks and Henning Henningsen, and epilepsy, with Drs Bruce Hermann, Paul Rutecki and Austin Woodard. ALS is an inexorably progressive neuromuscular disease, also known as "Lou Gehrig's Disease." Ninety percent of the patients succumb within three years of onset of the disease due to muscle weakness and wasting. The goal is to develop improved methods for early diagnosis, monitoring the effects of newly developed drug therapies, as well as for better staging of the progression of the disease. In patients with epilepsy, the goal is pre-surgical determination of language lateralization in patients scheduled for temporal lobectomy.

In addition to being technically challenging, fMRI using the BOLD-contrast mechanism requires significant cooperation on the part of the patient or research subject. This might not be possible in some subjects, e.g., pre-surgical patients. A related method that does not require task performance also is under investigation by Dr Mark Lowe. This method, originally reported by researchers at the Medical College of Wisconsin, (Biswal B et a., 1995) attempts to identify functionally connected regions of the brain by correlations in their MR signals while the subject is in a resting state. The hypothesis is that there are correlated changes in blood-flow (and thus in MR signal level) in functionally related regions of the brain during rest.

To perform a functional connectivity study, the subject lies still for 6-7 minutes during which EPI images are acquired at 1-2 second intervals. In addition to random noise, relatively low-frequency (a few cycles per minute) variations in signal level are seen reflecting random, physiologically driven changes in local blood flow. These variations show a similar pattern across anatomically distinct, but functionally related, regions of the brain.

The signal from a selected pixel in a region of brain, e.g., the motor cortex, is then correlated with signals from all other pixels. A statistical test is performed for each comparison to determine the strength the correlation (if any), and a threshold is applied to create an image showing those regions of the brain with strong correlations to the selected pixel.

Figure 7 shows an image of the brain onto which has been rendered those regions that were strongly correlated with the pixel in the primary motor cortex. These regions include the homologous primary motor cortex and the paracentral lobule (center).

Many questions remain to be answered regarding the interpretation and use of data from functional connectivity studies. However, this technique could have important practical applications (e.g., for patients who are unable to perform motor tasks as well as for basic research to understand patterns of connectivity in the brain.

Related readings

* J W Belliveau, D N Kennedy, R C McKinstry, B R Buchbinder, R M Weisskoff, M S Cohen, J M Vevea, T J Brady, B R Rosen. Functional mapping of the human visual cortex by magnetic resonance imaging, *Science* 254 (1991):716-719.
* B Biswal, F Z Yetkin, V M Haughton, J S Hyde. Functional connectivity in the motor cortex of resting human brain using echo-planar MRI, *Magn. Reson. Med.* 34 (1995):537-541.
* T Bortfeld, J Burkelbach, R Boesecke, and W Schlegel. Methods of image reconstruction from projections applied to conformation radiotherapy, *Phys Med Biol* 35 (1990):1423-1434.
* A Brahme. Optimization of stationary and moving beam radiation therapy techniques. *Radiotherapy and Oncology* 12 (1988):129-1229.
* A M Cormack. A problem in rotation therapy with X-rays. *Int J Radiat Oncol Biol Phys* 13 (1987):623-639.
* T Holmes, TR Mackie, DJ Simpkin and P Reckwerdt. A unified approach to the optimization of brachytherapy and external beam dosimetry. *Int J Onc Biol Phys* 20 (1991):859-873.
* TW Holmes and TR Mackie. A filtered backprojection dose calculation method for inverse treatment planning. *Med Phys* 21 (1994):303-313.
* JT Lyman. Normal tissue complication probabilities: variable dose per fraction. *Int J Rad Oncol Biol Phys* 22 (1992):247-250.
* TR Mackie, TW Holmes, S Swerdloff, PJ Reckwerdt, JO Deasy, J Yang, BR Paliwal and TJ Kinsella. Tomotherapy: a new concept for the delivery of dynamic conformal radiotherapy. *Med Phys* 20 (1993):1709-1719.
* S Ogawa, TM Lee, AS Nayak and P Glyne. Oxygen-sensitive contrast in magnetic resonance image of rodent brain at high magnetic fields. *Magn Reson Med* 14 (1990):68-78.
* HD Suit and SJ Westgate. Impact of improved local control on survival. *Int J Radiat Oncol Biol Phys* 12 (1986):453-458.
* HD Thames, TE Schultheiss, JH Hendry, SL Tucker, BM Dubray and WA Brock. Can modest escalations of dose be detected as increased tumor control? *Int J Rad Oncol Biol*

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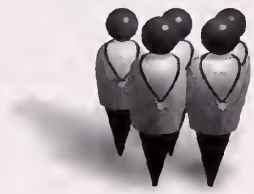
Phys 22 (1992):241-246.

* KR Thulborn, JC Waterton, PM Mathews and GK Radda. Oxygenation dependence of the transverse relaxation time of the water protons in whole blood at high field. *Biochim Biophys Acta* 714 (1982):265-270.
* R Turner. Functional mapping of the human brain with magnetic resonance imaging, *Semin Neurosciences* 7 (1995):179-194.

Contributors

1. T.R. Mackie, P.J. Reckwerdt, J.O. Deasy, P.M. DeLuca, Jr., and T.K. Kinsella, Departments of Medical Physics and Human Oncology.
2. US Patent No. 5,317,616 called *Method and Apparatus for Radiation Therapy* was issued to the Wisconsin Alumni Research Foundation (WARF) which clearly claims the temporally-modulated collimators.
3. C.A. Mistretta, T. Grist, R. Frayne, and F. Korosec, Departments of Medical Physics and Radiology.
4. J.A. Sorenson, M. Lowe, D. Cordes, and B. Mock, Departments of Medical Physics and Radiology. ❖



MetaStar Matters

Blood Transfusion for Chronic Anemia Project

Jay A. Gold, MD, JD, MPH; Dale R. Tavris, MD, MPH; and Nathan F. Williams, MS, Madison

After the Los Angeles earthquake of 1994, there was some concern about the adequacy of the nation's blood supply in the face of such disasters. The US Department of Health and Human Services and the American Red Cross announced a joint initiative to take steps to safeguard the blood supply. As part of this initiative, the Health Care Financing Administration (HCFA) asked quality improvement organizations like MetaStar to conduct improvement projects in this area. Of course, concerns about adverse reactions to transfused blood constitute another reason to limit the amount of blood transfused where possible.

A review of the literature indicated that a half-dozen studies have found consistently that a substantial proportion of red cell transfusions are unnecessary.[1] Limiting our topic to transfusion for chronic anemia, we assembled a study group consisting of medical directors of three of the four blood banks that service Wisconsin, along with specialists in hospital-based pathology, internal medicine, and hematology. Using a liberalized version of recommendations of the American College of Physicians[2] (Table 1) and the American Association of Blood Banks (Table 2), we developed a quality indicator to measure unnecessary red cell transfusion for chronic anemia.

We analyzed hospital characteristics and transfusion practices in order to calculate "expected" numbers of transfusions at Wisconsin hospitals, and hence to identify hospitals where actual transfusion practices significantly exceeded the expected number of transfusions. From this analysis, fourteen Wisconsin acute care hospitals were

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Table 1. American College of Physicians Recommendations

Absent risk factors, transfusion is not indicated independent of hemoglobin level. Risk factors include coronary artery disease, valvular heart disease (e.g., hemodynamically significant AS), CHF, history of TIA, previous thrombotic stroke, risk factors for myocardial or cerebral ischemia.

- Transfuse to relieve symptoms related to decreased red cell volume. Symptoms include syncope, dyspnea, tachycardia, angina, postural hypotension, TIA.
- Avoid empiric, automatic transfusion threshold.
- Transfuse on unit-by-unit basis; one unit may be sufficient.
- Normovolemic anemia with hemoglobin >7 g/dL is well tolerated in asymptomatic patients.
- Rule out reversible anemias; transfuse only when interventions like vitamins, iron, or erythropoetin have been insufficient.
- Do not transfuse to enhance general sense of well-being, to promote wound healing prophylactically (in the absence of symptoms), or to expand vascular volume when O_2- carrying capacity is adequate (use crystalloids for this purpose).

MetaStar Matters is not reviewed by the *WMJ* Editorial Board. Dr Gold is Senior Vice President and Principal Clinical Coordinator, Dr Tavris is Associate Clinical Coordinator; and Mr Williams is a biostatistician, and all are associated with MetaStar. Reprint requests to Jay A. Gold, MD, JD, MPH, MetaStar, 2909 Landmark Place, Madison, WI 53713.

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identified where ratio of actual to expected numbers of transfusions significantly exceeded the state average. We invited all of these to collaborate in this project, and five accepted.

From the five collaborating hospitals, MetaStar abstracted and analyzed 236 medical records of patients discharged between January 1994 and August 1995 with a diagnosis of chronic anemia and who received at least one blood transfusion. The details of the analysis are shown in Figure 1. Note that cases are said to be "eligible" for transfusion when transfusion *arguably* was indicated; eligibility does not imply that transfusion in these cases necessarily was appropriate.

The analysis confirms that a large number of red cell transfusions for chronic anemia are unnecessary, as can be seen from the following three considerations:

- Of the 153 included cases, 23 (17+6), or 15.0%, were found definitely not eligible.
- Of the 73 included cases with a hemoglobin $\geq$ 8 g/dL, the 23 definitely not eligible cases constituted 31.5%.
- When one considers that the criteria used in the study were rather more liberal than the guidelines, that eligibility for transfusion was defined extremely broadly, and that the study did not look at the appropriateness of multiple-unit transfusions, one safely may conclude that the study almost certainly understates considerably the rate at which red cells are being transfused unnecessarily.

It should be noted that one collaborating hospital disagreed with a number of our determinations of

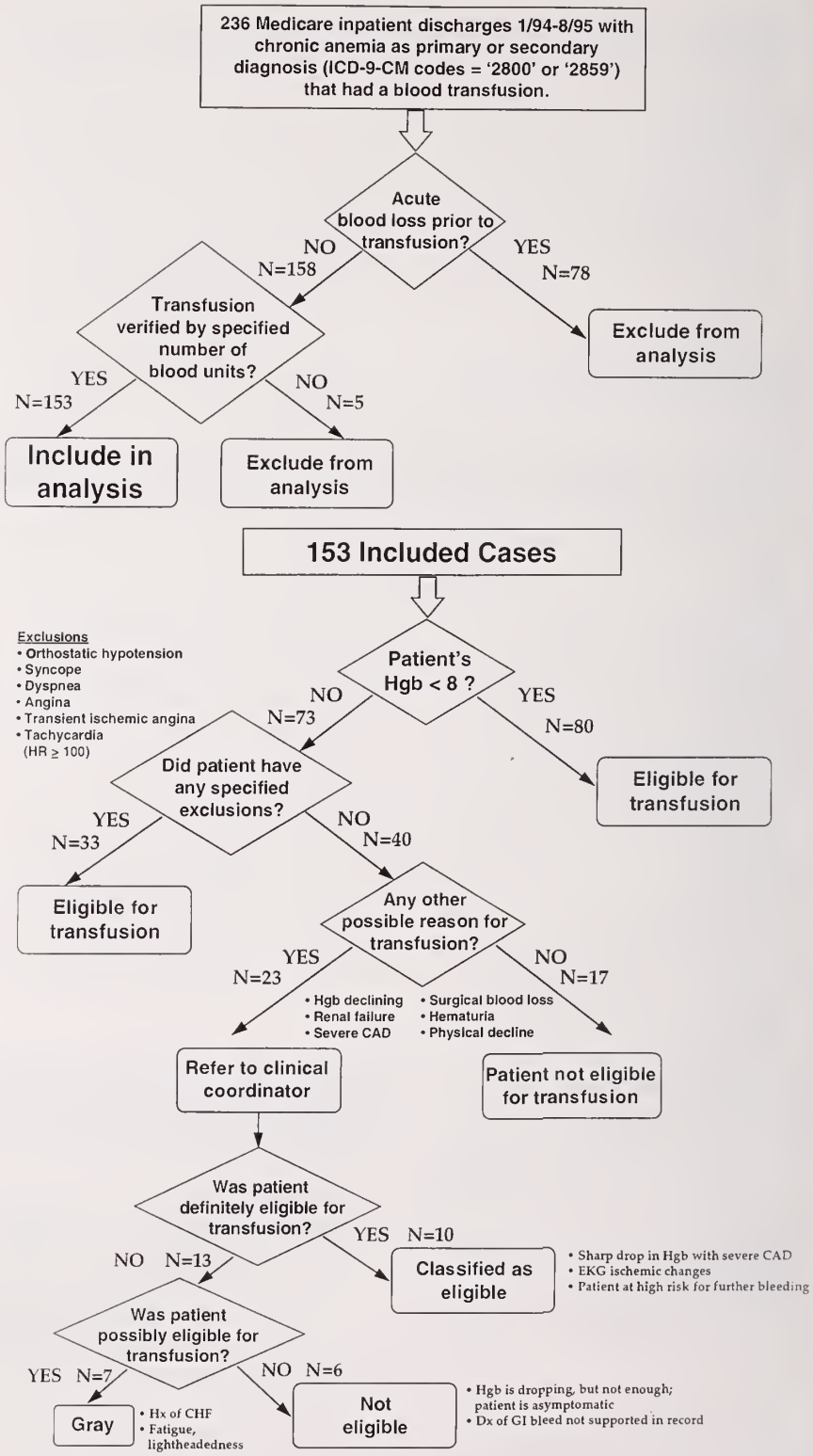

Figure 1.

ineligibility for transfusion.

The principal author visited each of the five collaborating hospitals to provide feedback. At these visits, the data from the study was presented, the indications for blood transfusion in chronic anemia patients were discussed, and each of the providers was asked to develop and implement a quality improvement plan aimed at improving the way in which the need for blood transfusions in chronic anemia patients is assessed.

MetaStar plans to conduct a follow-up data collection and analysis to determine the extent to which this project was successful in its goal of reducing the number of unnecessary blood transfusions.

Table 2 American Association of Blood Banks Guidelines for RBC Transfusion

Symptomatic anemia in a normovolemic patient

- Acute loss of $\geq$ 15% of blood volume
- Acute blood loss with evidence of inadequate O_2 delivery
- Pre-op hemoglobin $\leq$ 8 g/dL and procedure associated with major blood loss
- Hemoglobin <9 g/dL in patient on chronic transfusion regimen

References

1. Welch HG, Meehan KR, Goodnough LT. Prudent strategies for elective red blood cell transfusion. *Ann. Int. Med.* 1992; 116:393-402.
2. American College of Physicians. Practice Strategies for Elective Red Blood Cell Transfusion. *Ann. Int. Med.* 1992; 116:403-406.❖

How to Document Violence and Abuse

Kalisa Barratt, JD, SMS Assistant General Counsel

Documenting violence and abuse is an essential part of the patient's ongoing care. Moreover, well-documented records may be crucial to the outcome of any legal case. According to some statistics, only 5% of domestic violence victims are so identified. Consider the following suggestions when treating a potential abuse victim. **(See also, *Domestic Violence: Deciding When and When Not to Report* on page 63.)**

- Conduct the interview and examination apart from the victim's spouse or partner to ensure accurate diagnosis.

- Include a complete medical history. Detailed documentation, including type, number, size, location of the injuries, etc., in the medical records will provide concrete evidence against the abuser. Where applicable, injuries should be recorded on a body chart or drawing.

- Document relevant social history and historical injuries which may have been a result of abuse or violence.

- When possible, take color photographs (along with a color standard) before medical treatment is given.

  * Take photos from different angles, including the patient's face in at least one.

  * Take at least two photos of every major trauma area.

  * Hold up a coin, ruler or other object to illustrate size of injury.

  * Mark photos precisely with name, location of injury, and names of photographer and others present.

- Recognize that, because of the nature of the abuse, there is a high likelihood that the victim will recant statements concerning the abuse when speaking with law enforcement officers or in court.

  * The medical record may be considered more credible than the witness.

  * Subjective statements documented in the medical record concerning the external source of the injury may not be considered hearsay in court.

  * "My partner hit me with a bat," is preferable to "Patient has been abused."

- Document specific information and counselling provided to the patient by the physician. Include pamphlets or materials given to the patient. This may be considered a physician's responsibility under the duty of **informed consent.**

Kalisa Barratt, JD

- Document whether patient consents to reporting abuse to authorities.

- Document your decision to report or not to report any medical findings supporting that position. Document that report was made.

For more information, contact Kalisa Barratt, JD, at SMS ext. 233 or via e-mail at: KALISAB@smswi.org. ❖

Domestic Violence: Deciding When and When not to Report

Susan Kinast-Porter, MD, Member, SMS Domestic Violence Subcommittee

In the last five years, as physicians' awareness of domestic abuse has risen, so has the level of confusion over when domestic abuse should be reported. The SMS policy, developed by the Task Force on Domestic Violence and approved by the State Medical Society Board in 1994, states the following:

VIO-994: Treatment of Victims of Domestic Violence

"[I]t is...vital that physicians pay great respect to a patient's right not to disclose domestic abuse or to refuse intervention when the patient believes such action is not in his or her best interest. The role of the physician in this process is to offer patients options and allow them to make the decision in their lives. The patient's decision should be documented in the medical record. **[See *How to Document Violence and Abuse*, page 62.]** There are specific circumstances in which intervention must occur without the patient's consent.

- if child abuse or neglect (anyone under 18) is disclosed or highly suspect;
- if there is a question regarding a patient's mental competency;
- if there are gunshot wounds or life-threatening injuries;
- if the physician believes the patient to be at high risk for life-threatening or serious injury.

In the above circumstances, mandatory notification of appropriate intervention agencies should be explained to the patient. Providers should take care to assure the patient that such action is being taken to provide him or her with additional assistance, it is not punitive."

The state statutes relevent to this issue are as follows:

Wis. Stats. §146.995 Reporting of wounds and burn injuries:

(2)(a) Any person licensed, certified or registered by the state under ch. 441, 448, or 455 who treats a patient suffering from any of the following shall report ..:

1. Any gunshot wound (unless it appears to be at least 30 days old).
2. Any wound other than a gunshot wound if the person has reasonable cause to believe that the wound occurred as a result of a crime.
3. Second-degree or third-degree burns to at least 5% of the patient's body...if the person has reasonable cause to believe that the wound occurred as a result of a crime.

Wis. Stats. §968.075 Domestic abuse incidents; arrest and prosecution

(1)(a) "Domestic Abuse" means any of the following offenses engaged in by an adult person against former spouse with whom the person resides or formerly resided or has a child in common:

1. Intentional infliction of physician pain, injury or illness.
2. Intentional impairment of physical condition.
3. Sexual assault.

(2) circumstances requiring arrest: law enforcement officer has reasonable grounds to believe person has committed domestic abuse and actions constitute a crime and there is evidence of physical injury to victim.

The SMS continues to support the sanctity of the physician-patient relationship. Reporting domestic violence against the patient's will violates her confidence and decreases further her struggle for control.

In addition, even when appropriate referrals to a shelter, crisis line and a safety plan are made, reporting may increase the woman's immediate risk of harm. The decision to report has to be made on a case-by-case basis by the patient and the physician after taking all facts into account.

Remember, even if the perpetrator is arrested and taken to jail, he will be held for only 24-hours, in most cases, before being released and potentially he could again harm the victim.

For more information on domestic violence, **contact Lynn Sherman at the SMS at (800) 362-9080, ext. 235 , or via e-mail at LYNNS@smswi.org.**

The SMS offers free posters for physician offices and educational materials for physicians on diagnosing and treating victims of domestic abuse.❖

Susan Kinast-Porter, MD, is a family physician at the Monroe Clinic. Doctor Kinast-Porter was a member of the State Medical Society's Task Force on Domestic Violence from its inception in 1992, and now is a member of the Injury Prevention and Control Commission and its subcommittee on Domestic Violence.

Your Financial Fitness

Cutting Costs on Homeowners Insurance

Michael J. Dolan, CLU, ChFC, Madison

FIRE, FLOOD, hurricanes, earthquakes, tornadoes...we seem to be seeing them all. Whether or not you live in a target zone for natural disaster, however, you want to be sure your homeowners insurance is adequate and up-to-date. At the same time, of course, you want to keep costs down.

Start by having enough insurance of the right kind.

Your basic homeowners policy protects you against physical damage to your property resulting from a list of perils: fire, theft, windstorm or hail, explosion, and so on. More expensive "all risk" policies extend protection to everything except specified exclusions, flood and earthquake among them. You can buy separate flood insurance, and should if you live in an area where flooding is a possibility, and can also add earthquake coverage to your homeowners policy.

You should consider coverage to full replacement value, not what it would cost to buy your home today but what it would cost to rebuild it, from the foundation up, if it were destroyed. And, if your community has adopted new zoning or building codes since your house was built, you may also want to consider a special policy rider that would cover the higher cost of rebuilding to meet the new standards.

Personal property is typically covered up to half the value of the house itself, but you can arrange for more coverage. If you own valuable individual items such as jewelry, silverware, furs, or cameras, your homeowners policy will limit the amounts you can claim; you need to add a scheduled personal articles floater for full coverage.

Your homeowners policy also protects against liability claims, such as those stemming from a neighbor tripping on your property and being injured. The standard liability limit is $100,000, but you can and probably should raise the limit. Think, too, about coordinating liability limits in your homeowners and automobile insurance policies and purchasing an "umbrella" liability policy to pick up where both your basic policies leave off.

Once you determine the appropriate level of coverage, keep costs down by:

- Taking the largest deductible you can afford, over and above the standard $250 deductible in most homeowners policies. A $500 deductible, depending on the amount of insurance on your house and which company you use, might save you from 10% to 15% of the annual premium.

Michael Dolan, CLU, ChFC

- Comparison shop for coverage, bearing in mind that service may be as important as cost. Finding the lowest premium won't do you much good if you have difficulty collecting in the event of a claim.

- Consider buying both homeowners and auto insurance from the same company.

- Keep your insurance company informed about any changes (such as the installation of a security system or the sale of an art collection) that could affect your coverage and lower your costs.❖

Dolan is president and chief operating officer of SMS Insurance Services and a member of the National Associaiton of Life Underwriters.

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Physician Briefs

The * indicates member of the SMS.

Tom Anderson, MD, professor of medicine and chief of hematology/oncology at the Medical College of Wisconsin, has been named to the professorship of clinical oncology of the American Cancer Society, Wisconsin Division. Chairman of the National Cancer Institute's Cancer Clinical Investigation Review committee, Dr Anderson is recognized as one of the nation's top specialists in medical oncology and hematology. He serves as associate director of the clinical investigations group at the Medical College of Wisconsin Cancer Center and practices at Froedtert Memorial Lutheran Hospital.

Lynn Gershan, MD, a pediatrician, joined the medical staff of Northshore Pediatrics, Milwaukee, part of Children's Medical Group. Dr Gershan earned her medical degree from McGill University.

Richard Horecki, MD, internist, joined the medical staff at Luther Hospital and Midelfort Clinic. Dr Horecki earned his medical degree from the University of Minnesota, Minn, and completed his internship and residency at Emory University, Atlanta. Dr Horecki is board certified by the American Board of Internal Medicine and is a member of the American College of Physicians.

Jeffery Huhn, MD, surgeon, joined the medical staff of Victory Medical Center. Dr Huhn earned his medical degree from the University of Wisconsin Medical School in 1987. He completed his general surgery residency at the Marshfield Clinic. Dr Huhn is board certified in general surgery.

John J. Jacks, MD,* an occupational industrial medicine specialist, joined the medical staff of Marshfield Clinic. Dr Jacks earned his medical degree from the University of California at Los Angeles (UCLA) Medical School, Los Angeles, Calif. He completed his residency and fellowship in family practice at the University of Utah in Salt Lake City.

Joseph Krien, MD, family practitioner, joined the medical staff of the West Salem Clinic. Dr Krien earned his medical degree from the University of Wisconsin Medical School, and completed his residency at the Franciscan Skemp Healthcare Hospital in LaCrosse in 1996.

Gordon Kronquist, MD,* pediatrician, joined the medical staff of Edgerton Clinic. Dr Kronquist earned his medical degree from the University of Wisconsin, and completed his internship and residency at St. Lukes Hospital in Cleveland, Ohio. Dr Kronquist is board certified in pediatrics.

Richard J. Mayrer, MD, family practitioner, joined the medical staff of the Medford Clinic. Dr Mayrer earned his medical degree from Northeastern Ohio Universities College of Medicine in Rootstown, Ohio. He completed his residency in family practice in 1994 through the University of Wisconsin Family Practice Residency Program at Wausau Hospital. Dr Mayrer became board certified through the American Board of Family Practice in 1994.

Margaret Roberts, MD, was appointed assistant professor of physical medicine and rehabilitation at the Medical College of Wisconsin, Wauwatosa. Dr Roberts is also lead physician for physical medicine and rehabilitation at the VA Medical Center of Milwaukee.❖

County Society News

Columbia-Marquette-Adams. The following physicians were approved for membership by the Columbia-Marquette-Adams Medical Society: Burton D. Cox, Jr, DO; Wajahat U. Khan, MD; Muzaffar B. Mirza, MD; and Thomas Mitchell, MD.

Grant. Grant County Medical Society approved membership for the following physicians: Karl W. Ayer, MD; Keith B. Hummel, MD; and Nabeel Jabri, MD.

Pierce-St. Croix. The following physician was approved for membership into the Pierce-St. Croix Medical Society: Anthony C. Hecht, MD

Sauk. Sauk County Medical Society approved membership for the following physician: Linda J. Hill, DO.

Winnebago. The following physicians were approved for membership into the Winnebago County Medical Society: Scott A. Anderson, MD; Roman Kaplan, MD; John N Korger, MD; Kathleen R. Price, MD. ❖

Obituaries

Arndt, George W., MD, 71, a psychiatrist from Neenah, died April 6, 1997. Dr Arndt earned his medical degree from the University of Wisconsin Medical School, 1953. He completed his internship at Madison General Hospital, Madison, and his post-graduate work in psychiatry at the Menninger School of Psychiatry. Dr Arndt was past-president of the Winnebago County Medical Society, a former member of the medical licensing board of the State of Wisconsin, a delegate to the SMS Annual Meeting, a Life Fellow of the American Psychiatric Association, a member of the American Association for the Advancement of Science, and the National Association of Correctional Health. He is survived by his wife, Ila, four children: Julie Meinke; George W. Arndt, Jr; Susan Torfin; and Charles Arndt; fourteen grandchildren, and one great grandchild.

Herrington, Roland E., MD, 74, general surgeon and general practitioner, formerly of Milwaukee, died March 1, 1997. Dr Herrington earned his medical degree from Marquette Medical School, Milwaukee in 1946. He completed his internship at Columbia Presbyterian Medical Center, New York City, 1949 and his residency at Deaconess Hospital, Milwaukee, 1957. Dr Herrington was a captain in the US Army Medical Corps from 1951 to 1953. He was medical director of DePaul Rehabilitation Hospital in the mid-70s and established one of the first programs in the nation for impaired physicians. Dr Herrington co-edited the medical reference work *Alcohol and Drug Abuse Handbook,* and gained national recognition for setting up the impaired professionals program there. In 1982, he received the Distinguished Service Award by the Medical Society of Milwaukee County for work with impaired physicians. In 1988, he received the Meritorious Service Award from the State Medical Society.

Dr Herrington was an assistant clinical professor in the Psychiatry and Mental Health Sciences Department at the Medical College of Wisconsin when he retired in 1990. He was a member of the Medical Society of Milwaukee County, Fellow International College of Surgeons, American Medical Society on Alcoholism and other Drug Abuse, the American Medical Association, and the American Society of Addiction Medicine. He is survived by his wife Beulah, of Palm Springs, Calif; two brothers, Jack Herrington, MD, and Raymond Herrington, and a sister, Ruth Ann Wilson.

Poser, Rolf F., MD, 83, internist from Columbus, died April 6, 1997. Dr Poser earned his medical degree from the University of Wisconsin Medical School, Madison. He completed his internship at St Joseph's Hospital, Chicago in 1939 and his residency from Wisconsin General Hospital, Madison in 1946. Dr Poser served the Columbus area for over fifty years. He was a fellow of the American College of Physicians, a Diplomate of the American Board of Internal Medicine, and he was a member of the Fifty Year Club of the State Medical Society. Doctor Poser is survived by his wife Mary of Columbus; six children, Rolf Poser, MD, of Columbus; Kristin Keepman of Madison; Sam Poser, MD, of Columbus; Stephen Poser of Columbus; Helen Poser of Columbus, Berit Poser of Columbus; and 13 grandchildren.❖

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The memorial program of the SMS Foundation offers physicians a unique opportunity to provide a living memorial to a loved one or friend through a gift to the Foundation. A memorial contribution can provide financial aid to a needy medical student, help stimulate research on behalf of the public health or aid in the preservation of Wisconsin's medical history. When a memorial gift is made to the Foundation, the deceased person's family receives a special card with the name of the donor. For more information, contact Julie Hein, Executive Director, SMS Foundation at ext. 323 or via e-mail at: JULIEH@ smswi.org.❖

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AMA Awards

The Wisconsin physicians listed below recently earned AMA Physician's Recognition Awards. They have distinguished themselves and their profession by their commitment to continuing education, and the SMS offers them its congratulations. The * indicates members of the SMS.

December, 1996
Alter, Albert J,
* Barkmeier, John R.
* Basu, Sailendra N.
* Benson, Lisa S. Poss
* Cesarec, Robert G.
* Christensen, Dennis D.
* Galarnyk, Ihor A.
Hutt, Edward D.
* Jacobi, Michael A.
* Karen, Robert
* Kochar, Mahendr S.
* Leehey, Paul J.
* Milrath, John R.
Moses, Sarala J.
Nelson, Robert M.
* Noble, John H.
Robnik, Spencer L.
* Saarinen, David M.
* Schaus, Paul W.
Sherry, James J.
* Wood, Gary

January, 1997
* Ailsworth, Karen S.
Cusick, Joseph F.
* Davidoff, Donn D.
* Di Raimondo, Joseph C.
Huffman, Mark A.
Hyndiuk, Robert A.
* Jeranek, William J.
* Kim, Eun Y.
* Luskin, Allan T.
* Myers, Franklin L.
* Nordby, Eugene J.
* Schulz, Emil
* Smith, Martin J.
Walsh, Patrick R.

February, 1997
Almassi, Gholam H.
* Billings, Kenneth J.
* Budzak, Lynn M.
* Darrow, Gregory L.
Desai, Paresh B.
* Edwards, Richard W.
* Fiedler, Howard W.
* Finesilver, Alan G.
Geotsalitis, Geo N.
Geske, David L.
Kampschroer, Bernard H.
* Kuritz, Robert R.
* Lamps, Gary M.
Loteyro, Corazon B.
* McConnell, Mark E.
* Meyer, Glenn A.
* Plautz, Arthur C.
* Roenning, George H.
* Scott, C. Malcolm
Scott, Geoffrey A.
* Sellers, Robert L.
Sennett, Louis W.
Seno, Louis S.
* Skupniewicz, Raymond E.
* Townshend, Alice M.
* Utrie, John W.
* Wascher, Thomas M.

March, 1997
* Avecilla, Constante S.
Beltran, Luciano R.
* Brauer, Warren A.
* Brown, Ward M.
* Burdick, Evelyn E.
Chang, Chen-Kang
* Cowgill, Lale D.
* Dibbell, David G.
* Elias, Sharon L.
* Finch, David R.
* Gerson, Robert M.
* Kloehn, Ralph A.
* Knier, Michael S.
* Korkos, George J.
* Linscott, John R.
* Lyerla, Eric R.
* Maby, Sharon L.
Magnino, James J.
* Mirhoseini, Mahmood
* Munck, Paul E.
* Myers, William O.
* Olson, Carl E.
* Rave, Carol S.
* Russo, Paul H.
* Samadani, Ayaz M.
Schaafsma, Mercedes
* Simpson, Henry J.
Skatrud, James B.
* Starling, James R.❖

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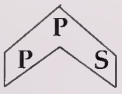

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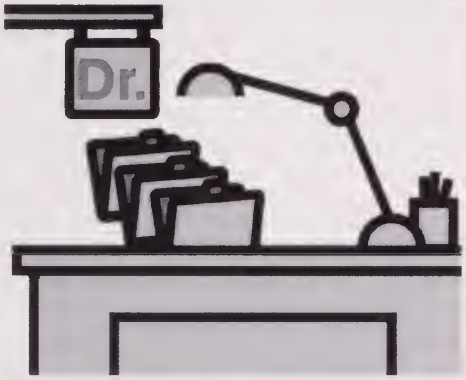

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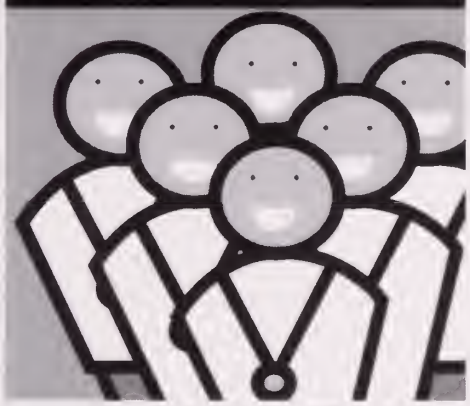

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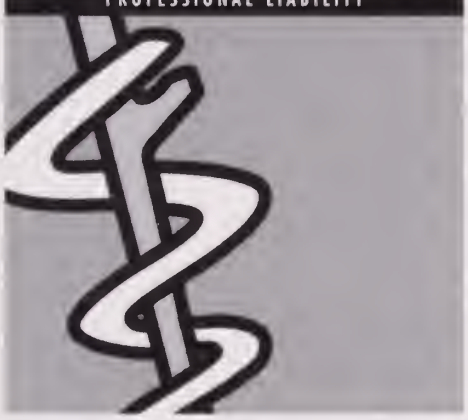

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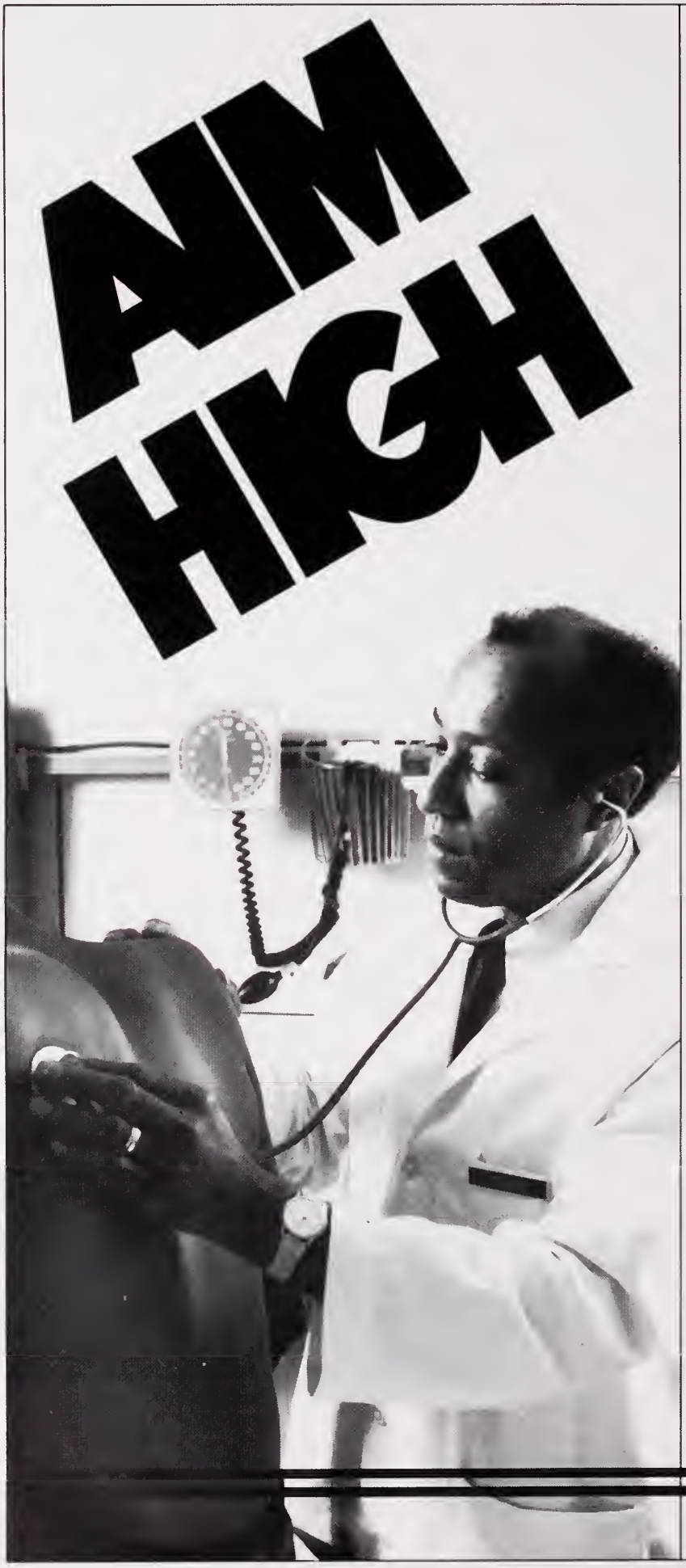

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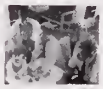

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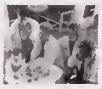

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Our cover: Physicians working with other health care providers can work as part of a team to bring more coverage to patients. These non-physician clinicians are trained, dedicated professionals who share the patient load and bring a different approach to the healing process.

SMS President, Sandra L. Osborn, MD, is shown on the cover with members of her "Team" at Dean Clinic's Atwood Avenue pediatrics department, and one of her patients, Renée Pellicore. Seated from left to right are: Pat Pugsley, RN, MSN, CS, CDE; Laura Gritzner, Phlebotomist; Jan Thyberg, RN; Renée Pellicore; Dr Osborn; Patti Laufenberg, NP; and Glenn Brandt, PA.

Related articles are shown in the table of contents with the following symbol: and can be found on WISMED, the SMS World Wide Web site, at **www.wismed.com.** Cover photo taken by Jon Walton of Jon Walton Photography, Middleton, WI.

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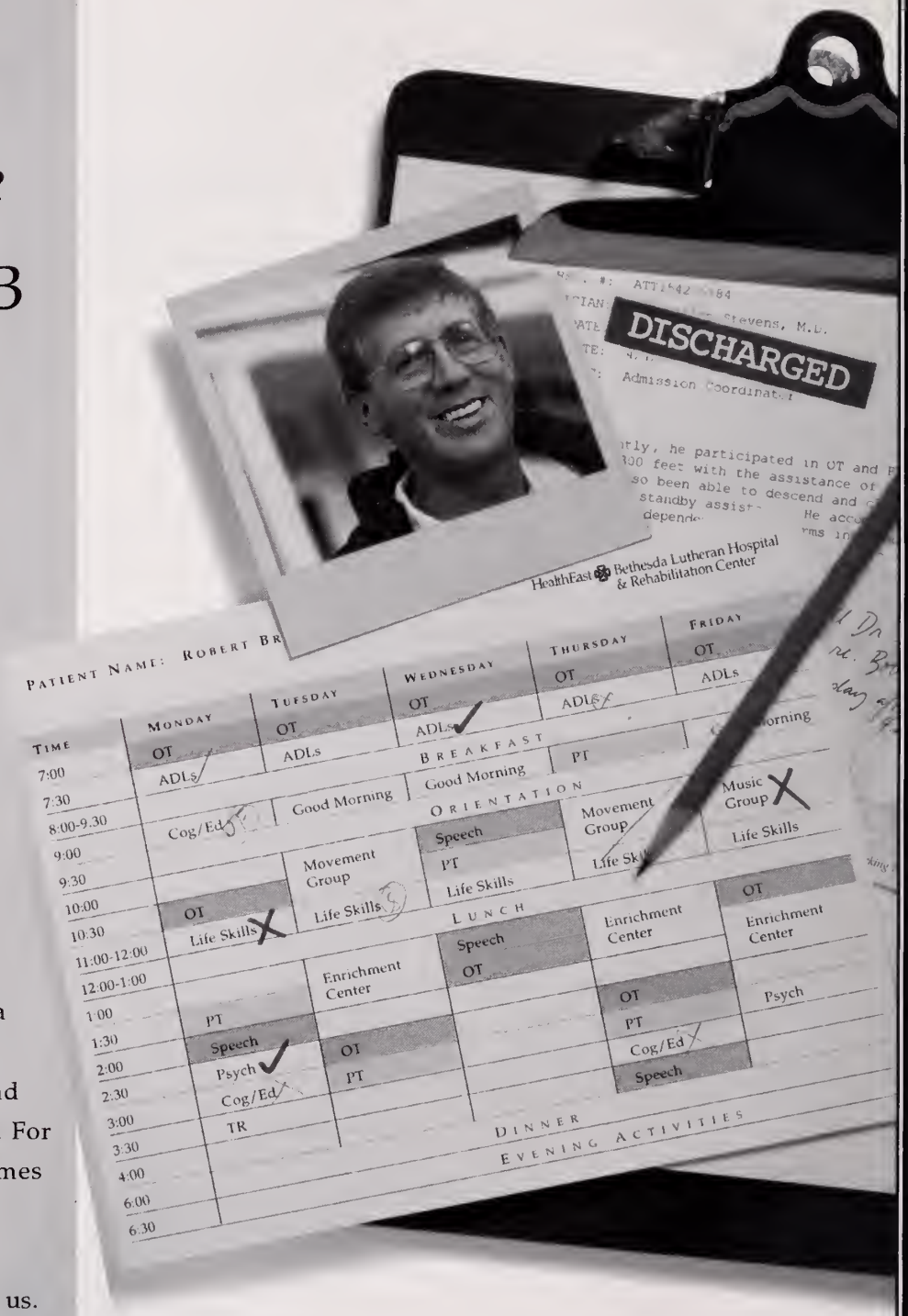

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President's Page
Partnering with Non-physician Clinicians

THIS ISSUE OF THE *WMJ* reviews the educational background, licensing/accreditation requirements and scope of practice of some of our professional colleagues who are a part of the "Medical Team." There are others who are also members of the Team who have not been included due to the limitations of space and time; their contributions to patient care are also valued and non-inclusion in this issue of the *WMJ* does not imply non-inclusion on the Team when their contributions benefit the patient.

In general, the Physician is seen as the leader of the Team, whatever its composition on a patient-by-patient basis. However, there are times when that is not the reality of the management of patient care. It is hoped that this issue will serve as a resource to clarify some of the details of our colleagues' areas of expertise and practice.

There are care aspects that each discipline shares with others and care aspects in which each has greater background and experience. Sometimes we share required formal educational arrangements, such as classes and practical applications, but often these are separate experiences until we have become a team. The training and practical experience of even those with shorter educational requirements, less rigorous training experiences, and ultimately, lower degree of responsibility for the outcome of our efforts is interesting to compare with the evolution of the American physician.

Historical Perspective

Following the American Revolution in 1776, four small medical schools were established by 1800. The first was the College of Philadelphia, now the University of Pennsylvania. The best medical education systems of that era were found in Europe. Principles from two of these were combined at Philadelphia: the Edinburgh model gave the medical school the "science" base of a University, and the London model gave the medical school the "art" base of a hospital. Together there were opportunities in anatomy and science labs, clinical and basic sciences, a botanical garden, library, and bedside teaching.

The tradition of awarding the "Doctor of Medicine" degree began then; it continues to be an honorary degree by English universities, as it was then. Columbia, Dartmouth, and Harvard completed the group of four and were modeled after the College of Philadelphia.

The basic scientific knowledge and clinical acumen of that era were different from ours today. Those early American physicians would be astounded by our ability to cure infections, prevent disease by immunization, and to prolong life with organ transplants to name only a few advancements. Indeed, they would see that our non-physician colleagues of today are in fact better prepared than they to deliver appropriate and effective medical care.

American medicine started as a model of excellence, providing the best medical education of its time. Unfortunately, this model soon had competition that reflected the American concept of entrepreneurship -- the first "for profit" medical school was established in Baltimore in 1807. A small group of physicians became owners/operators of their own medical school with profit as a primary goal. I hope that there was some idea that they could produce capable physicians, at least initially. They were successful and by the beginning of the 20th century, 457 similar schools had opened. Entrance requirements were low (usually less than a high school degree) and there was a short duration of education (usually a few weeks or months), essentially limited to

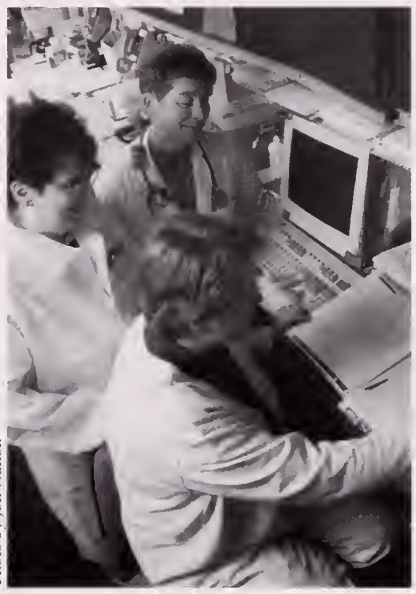

Photo by Jon Walton

Dr Osborn with Laura Gritzner, Phlebotomist, and Pat Hendrickson, RN.

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didactic lectures by the owners. Even though there were few required qualifications for graduation, the MD degree continued to be awarded. Existing regulations for medical training or practice were ignored or eliminated and the quality of medicine in the United States plummeted. It is understandable that concerned caregivers, such as midwives, were valued.

The American Medical Association (AMA) tried unsuccessfully for 50 years to raise the standards for medical education. When any school raised its standards, the students took their tuition monies to other schools, leaving the better institution in financial distress. In the late 19th century, a few medical schools raised their entry and educational standards and because of sufficient non-tuition funding were able to survive despite declining class size. But it wasn't until after Abraham Flexner's report on medical education, published in 1910, that this proprietary medical school era came to an end. Flexner's report changed public opinion and made it possible for the AMA to classify medical schools according to quality.

Increase Caregivers, Increase Care

By the 1960s our physicians and science were high quality, but the American people wanted to expand medical care to the poor and aged. The numbers of physicians expanded; but so did costs. The need for greater numbers of medical care givers, especially when costs became a major criteria, encouraged the enhancement of established disciplines, e.g., RNs and the development of new disciplines, e.g., PAs. This has been done with attention to education, "bed-side" experiences, and regulation.

We have capable colleagues on our teams; due vigilance in the balance of our teamwork should ensure that American medicine remains the standard setter for the world.❖

Letters to the Editor

Need to Reach Clinic Administrators

In a recent Letter to the Editor (**see April, 1997**), a paragraph was omitted that was meant to be the main point of my letter.

In discussing the governance changes that might occur which could improve the communication between SMS members and the State Medical Society, I suggested that a section for clinic administrators/managers be created. The SMS could use this method to reach members and have better feedback from clinic groups.

The letter went on to suggest that the SMS should develop the role of advocacy for the physician/patient relationship by being the vehicle to assist in bringing new computerized medical technology to the office. This effort would make SMS relevant to every office and to the physicians who are delivering patient care.

--Walther Meyer, MD, Medford❖

SMS Support is an Honor in Itself

Thank you very much for the support you gave me during my potential nomination to become the United States Surgeon General. President Clinton has chosen David Satcher, MD.

It is a great honor to know that I was a finalist. However, I am even more honored that you, as well as over 150 national medical and consumer organizations, and national leaders believed that my consumer, provider, political, and academic experience made me your choice for Surgeon General.

Trust, credibility and friendship transcends both achievement and disappointment. We have many battles to fight together, and I look forward to working with you to improve the health of all Americans now and into the future.

As we journey through life, it is the people we meet along the way that bring meaning to life.

I wish you good health, happiness and success.

--Richard J. Boxer, MD, Milwaukee ❖

Editor's Note: Letters may be edited for length, clarification and grammar.

Focus on Partnering with Non-Physician Clinicians

Physicians and Non-Physician Clinicians: Working Together to Provide Better Patient Care

Judith D. Burke, managing editor

RECENTLY, a friend made an appointment to see her physician for a check up and ended up seeing a nurse practitioner. She was a bit upset by the fact that the physician was unavailable and she thought she was getting "second best." But by the time she left the office, she was reassured that the nurse practitioner's (NPs) training and competencies were excellent. She realized too, that the nurse practitioner was going to be available a lot more frequently to answer her routine questions and provide health care education, than the physician. She made her next appointment with the nurse practitioner.

In this age of managed care, sharing the patient load with other highly-trained health care providers is becoming more and more common. Physicians no longer have the luxury of time to spend getting to know each patient and are turning over "routine" duties such as taking histories, reviewing medications and procedures, and providing preventative education.

There are approximately 26,000 physician assistants (PAs) and 100,000 nurses with advanced training in the US today. Many of these individuals work closely with physicians, often with physicians acting on a consultant basis, and work in all disciplines from primary care, to pediatrics, geriatrics, and many specialty areas.

Advance practice nurses and PAs have a broad scope of professional duties that often mimics the physician's duties. However, the training programs for physicians are still much more lengthy and take a different focus than those of other professional care givers.

Have you started working with these professionals in your office yet? We found that the numbers in Wisconsin are growing, and the likelihood of you having an NP or PA on staff in the near future is high.

Some physicians, like SMS President Sandra L. Osborn, MD, welcome the extra hands and eyes involved in patient care. Doctor Osborn is among the growing number of physicians who use professional care-givers in her busy pediatrics practice. She views the role of the physician and "other" care-givers as a crucial one in providing the best possible patient care.

"Having the nurse practitioner, physician assistants, and technicians available and working together as a team just makes sense," Dr Osborn told me recently.

"I can only do so much, be one place at one time, but having a team atmosphere here in the office frees my time up and I know that patients are getting high-quality care in a timely manner." Be sure to read Dr Osborn's *President's Page* column on **page 5** for more about her thoughts on the topic.

Patients may be put off at first when they see someone new in the office. But as Marc Kennedy found when writing the feature story, *Mid-level Practitioners Help Physicians Meet Growing Medical Needs* **(see page 8)**, many patients get over the initial concern when they learn that they have a capable, experienced professional, who works in concert with the physician, available to meet their health care needs.

This issue of the *WMJ* also brings you a collection of papers from colleagues working as PAs, NPs, Certified Nurse Midwives (CNMs), and unlicensed assistive personnel (UAPs). These papers, invited by Dr Osborn, serve to define the roles of each of these special providers, begin on **page 13**. They will give you an in-depth look at the distinctions between each of these professions and the ways in which they work with physicians.

And be sure to read the legal column by Kalisa Barratt, JD, that focuses on Scope of Practice and Medical Delegation on **page 51**. The article points out your responsibilities when employing these professionals in your office. ❖

Mid-Level Practitioners Help Physicians Meet Growing Medical Needs

Marc Kennedy, special to the *WMJ*

Cathleen Murphy and Eric Haney are part of a team, and not only because they are married. Murphy, a pediatric nurse practitioner and Haney, MD, a family practitioner and internist, work closely together, along with geriatric nurse practitioner Christina Custer to address the medical needs of their Mauston-area patients from prenatal checkups to elder care.

This team approach enables Haney, Custer and Murphy to serve a wide variety and number of patients, and exemplifies a national trend in health care that has been growing for more than a decade.

It is now commonplace for advanced practice nurses and physician assistants (PAs) to assume many activities formerly performed by physicians, including taking medical histories, counseling, teaching prevention, education, ordering and interpreting laboratory tests and X-rays, among others; and, for qualified advanced practice nurses and PAs, prescribing drugs.

For Haney, the nurse practitioners' (NPs) expanded duties and focus on prevention and wellness enable him to respond to specific, usually more acute needs of his patients at Mile Bluff Clinic in Mauston and its nearby satellites, as well as the hospital.

"Chris and Cathy allow me to establish a presence in several places at once," said Haney, who established his practice in Mauston in 1982.

"If I am at the hospital with a delivery, I know the patients are fine in their care. But they know where to find me if I'm needed."

Conventional wisdom may at-

tribute the rise in use of NPs and PAs to the evolution of managed care systems and their concomitant focus on controlling costs.

While this may be true to an extent, it is not necessarily the only driving force behind the increased reliance upon mid-level medical practitioners, and, in some in-

For Haney, the nurse practitioners' (NPs) expanded duties and focus on prevention and wellness enable him to respond to specific, usually more acute needs of his patients...

stances, may not even make a difference in the bottom line.

In a recent *Wall Street Journal* article, a major east coast managed-care company, Oxford Health Plans, Inc. established an agreement with Columbia Presbyterian Medical Center of New York to assign primary care status to highly trained nurses, and pay them the equivalent of physicians usually accorded such privileges.

Even if nurse practitioners are not paid as highly as primary care providing physicians, the article points out, that doesn't cut costs de facto. Some studies suggest that because nurse practitioners refer more patients to specialists than do primary practice doctors, the cost-efficiency of such programs is negated.

Providing Primary Care and More

Another key to the growth of reliance on NPs and PAs has as much to do with geography as economics. Certain locales had been chronically underserved by medical professionals, particularly less populated rural areas or urban lower-income and disadvantaged neighborhoods.

In rural Wisconsin, there may be fewer people, but distances to access health care are greater; and while the numbers might not warrant more physicians, they called for additional qualified primary care medical professionals, and NPs and PAs fit the bill well.

"In Mauston, at Mile Bluff Clinic, we have four physician assistants and two nurse practitioners -- Cathy and Chris," said Haney.

"And, at satellite clinics in Elroy, New Lisbon and Necedah, we use PAs to support the doctors. This area needed more providers. With the outlying clinics growing, we needed an anchor to be there day in an day out in the office. For me, it's been a wonderful addition."

When Haney first came to Mauston in 1982, there were no

physician assistants or advanced nurse practitioners, but their use began to gradually grow. Now, they form an integral part of the area's health care delivery system.

"While I'm more illness-oriented," said Haney, "Cathy and Chris concentrate on the things that would get short shrift if it were up to me alone. They spend more time with patients, but we consult if necessary."

"We like to be available to our patients," said Murphy. "We all work together to stagger vacations so that they know that one of us will be here. So, if Dr Haney isn't in the clinic, we still have coverage."

But the nurse practitioners offer more than coverage. They organize and maintain myriad programs and activities that focus on prevention and patient education.

"We focus on things such as well-child care related to growth and development," explained Murphy, who also works with teenage mothers.

"We try to anticipate needs of new moms, and help them key into different stages of development of their kids; for example, eating solids at four months.

"Also, standards for immunizations changing quickly, this can confuse parents. We help explain what they are for, how to anticipate side effects like fevers, and prevent them."

While Murphy focuses on pediatrics, she also works with the visiting oncologist, assisting with administration of chemotherapy, and working with the patients' families. On the other hand, Custer specializes in adults and geriatrics, including monitoring diabetics.

"We provide total care as part of a team," said Murphy.

"I'd be the first to refer something to the doctor. If one of us doesn't feel comfortable with a situation, we consult with the other team members. I think people are reassured by this."

The Patient's Point of View

One patient is. Sally Erickson knows all of the Mile Bluff Clinic team members well. She got to know Haney and Murphy during her pregnancy, and worked later with Custer when she developed diabetes.

"I feel very comfortable with them," says Erickson. "Cathy and I got to be close when I was pregnant eight years ago, and even when I haven't been to the clinic for a while, she still treats me like an old friend.

"Now that I discovered I have diabetes, Chris and Dr Haney work together. Chris is so open to helping me. She knows I was having trouble finding time to work, cook for my family and then cook something different for myself. So, she lends me her own books on recipes for diabetics. I didn't even ask. And, she even nags me about exercise.

"They are really more like my friends than nurses or doctors."

Does it bother her that she often sees a nurse rather than a physician? Not at all.

"I know they all work as a team," said Erickson.

"If Chris has a concern, she goes to the doctor. I know they talk, they both study the X-rays. Perhaps it might be older people who might be bothered by that, but not me," said Erickson.

"While I'm more illness-oriented, Cathy and Chris concentrate on the things that would get short shrift if it were up to me alone. They spend more time with patients, but we consult if necessary."

Eric Haney, MD

Freeing the Physicians' Time

According to Paul Wegehaupt, MD, a pediatrician at the Rhinelander Medical Center, he really can't recall anyone having misgivings about PAs or NPs addressing primary care issues.

"We have two physician assistants and two nurse practitioners, which has worked out well for us," said Wegehaupt.

"The two PAs work primarily in urgent care. By seeing urgent and non-chronic health problems in a walk-in care type of environment, they open up the internists' schedules for more opportunities to care for regular patients.

"Our nurse practitioners are certified in OB/GYN, and handle routine care, annual physicals, PAP smears, etc., so the OB/GYN doctors can make themselves more available for non-routine things."

Wegehaupt adds that the other nurse practitioner is certified in pediatrics, and takes a turn in the rotation with the three pediatricians in the clinic, "providing the whole gamut of pediatric services, though she doesn't feel real comfortable getting into the more complicated cases, which she refers to us."

In addition to helping assume some of the routine patient load, said Wegehaupt, the value of having quality nurse practitioners like the ones in his clinic is that, as in Mile Bluff Clinic in Mauston, they bring something else to the practice, establishing and maintaining prevention and wellness projects that doctors had long seen a need for but could not find the time to implement.

"Renee Ottinger, our pediatric nurse practitioner, by herself has worked up an entire set of practice guidelines for preventive care in childhood and adolescents.

"It's in the pilot phase now, just being introduced. With Renee out on maternity leave now, we'll get the whole package to put in place

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with kids by next year," said Wegehaupt.

She has also instituted a program to monitor the health of high-risk children in the community, called "KidsNet."

"We coordinate various ancillary services in the clinic at the hospital throughout the community, tracking the health care needs of premmies, children with hearing impairment, cerebral palsy, learning disabilities, even kids in families needing social services," said Ottinger.

"We try to identify these at risk kids, then try to line their parents up with the appropriate agency, and then follow up on the referral."

Though Ottinger has been with the clinic for a little more than a year, she has nothing but good feelings about the spirit of cooperation in the clinic.

"We have a good working relationship," she said.

"Perhaps some doctors have trouble relinquishing control over certain procedures, what has traditionally been their domain, but that's not occurring here.

"I imagine that some nurse practitioners have the same problem delegating some of their former responsibilities to nurses aides. But you need to look at if from the viewpoint of what the patient needs.

"For example, without this type of system, the clinic would not have the personnel to establish satellite clinics in surrounding communities like the ones in Crandon and Pottawatomi.

"We don't have to add a physician to staff these outlying clinics. We can cover more territory with nurses or PAs providing primary care. It's less expensive and meets the medical needs of local areas," continued Ottinger.

Continuing to Evolve

Despite the successful integration of NPs and PAs, Wegehaupt believes that there is room to improve.

"We can be more imaginative in how we are using mid-level practitioners," he said.

"Roles are pretty conventional roles here in rural Wisconsin, and they change slowly, to even have them is avant garde to some extent.

"But we're beginning to experiment. For example, having PAs and NPs working the Walk-in Clinic rather than hiring more physicians.

"We haven't begun using specialists in surgery or ENT, though."

Any changes in delivering health care, Wegehaupt said, should be considered based on the health care needs of the population, and how this care is provided.

"The two PAs work primarily in urgent care. By seeing urgent and non-chronic health problems in a walk-in care type of environment, they open up the internists' schedules for more opportunities to care for regular patients."

Paul Wegehaupt, MD

"Any such discussion needs to consider supply and demand together with nurses and doctors together, not apart, to ensure that community is receiving the optimum level of health care," he said.

"We need to make sure we are not overlapping too much in one area, and leaving other specialties underserved.

"We need to do a better job of long-range planning regarding who will deliver care, competition, discrepancies in training, definitions of medical practice, questions of physician surplus, and methodologies of reimbursement. These will become more important in the future."

Such weighty issues should not be addressed by individual clinics, or even discreet professions, he added, but across the board with input from all health care providers together, not separately.

"These are high-level policy issues that need to be dealt with head-on rather than ignored," said Wegehaupt, "with policies determined together with input from nurses, physicians and physician assistants, not separately; and not only by managed care organizations that hire practitioners based on short-term economics," Wegehaupt continued.

"Physician assistants still require direct physician supervision, but it gets a little more complicated now that advanced practice nurses can hang up their own shingle.

"Still, it's popular to talk about cooperation and coordination of health care delivery today; it doesn't always happen, but it can."

Future Partnerships, Specialties and Education

The need for advanced nurse practitioners and physician assistants in providing primary care will continue, and most likely become more specialized, according to Marc Hansen, MD, pediatrician at the University of Wisconsin Hospital in Madison, and member of the State Medical Society's WNA/SMS Liaison Commission.

"Since the trend began due to a shortage of primary care providers in the 1960s and 1970s, the requirements and focus has gradually become more specialized, particularly for physician assistants," said Hansen.

"Though PAs are naturally more tied to physicians, nurses have become more independent, as they become more highly trained and acquire greater responsibilities, such as writing prescriptions. Along with this goes the increase in risk, but I don't think this has been a problem."

Hansen said nurse practitioners have been especially valuable in promoting health care and illness prevention programs for children and women. Care for the elderly is looming on the horizon as the next arena of rising medical attention.

"There is a larger unmet need in assisting the elderly, in particular elder care facilities that already rely heavily on nurse practitioners," he said, adding that PAs will continue to evolve as specialty assistants in such areas as elder care, rather than remain focused mainly on primary care.

One aspect concerns Hansen about PAs: that almost by definition, their vocation is finite.

"There is really no where else for them to go. It's possible they can gain credits in college for experience, which they may use them to get into medical school. But PAs say they aren't interested in pursuing that angle, much like nurses, who are generally interested in nursing care."

Nurses can continue to gain credentials and responsibilities through more extensive education. PAs can too, to an extent, with Certified designation obtained through additional training.

"This lack of advancement opportunities may concern me," said Hansen, "but most PAs I have worked with are happy with what they are doing."

Filling Demand in Underserved Areas

Trying to meet the demand for trained medical personnel now in underserved areas of the state is the focus of a new initiative, Partnerships for Training. Under the auspices of the Wisconsin Area Health Education Center (AHEC), The Robert Wood Johnson Foundation awarded a six-year, $1.3 million grant to provide educational opportunities for nurse practitioner, certified nurse midwife and physician assistant students in underserved areas.

"We can be more imaginative in how we are using mid-level practitioners. Roles are pretty conventional roles here in rural Wisconsin, and they change slowly, to even have them is avant garde to some extent."

Paul Wegehaupt, MD

The initiative will use partnerships between educational institutions, health professional employers and public and private agencies to develop community sites to train students clinically in their home communities, mainly rural and inner-city Milwaukee sites.

"The strategy is to make education more accessible to individuals by providing 80% of the training in their own communities," said Barbara L. Nichols, director of the project known as WIS-TREC -- Wisconsin Program for Training Regionally Employed Care Providers.

"The idea is to work with health care providing institutions and existing academic institutions like vocational-technical schools, community colleges and university centers."

Other educational opportunities for mid-level health care practitioners are also becoming available. A physician assistant training program just received its initial three-year accreditation from the Commission on Accreditation of Allied Health Education Programs. The mission of the program, jointly sponsored by the University of Wisconsin-La Crosse, Gundersen Medical Foundation and the Mayo School of Health Related Sciences, is along the same lines as the AHEC initiative: to educate primary care physician assistants emphasizing practicing in rural and underserved areas of the region.

"This accreditation is a tribute to three institutions with a passion for educational excellence," said Arthur J. Ross III, MD, Gundersen Medical Foundation's director of medical education and co-medical director of the program.

All the physicians and professionals interviewed for this article feel that the need for expanded educational and practice opportunities exists and the partnership between physicians and mid-level practitioners is going to continue to evolve and be an important aspect of the future of organized medicine.❖

What is a NP, CNM, and PA?

	Nurse Practitioner (NP)	Certified Nurse-Midwife (CNM)	Physician Assistant (PA)
Definition	A registered nurse (RN) who has graduated from an accredited NP program and has received national certification.	A RN who has completed a nurse-midwifery program, obtained Wisconsin licensure as a CNM, and received national certification.	A health professional who has graduated from an accredited Physician Assistant Program and has passed the NCCPA exam.
Scope of Practice	An NP may, but is not limited to, perform any of the following nursing and medically-delegated services: * histories and physical exams * routine diagnostic studies * perform procedures, i.e. suturing, casting, and minor office surgery * diagnose, treat and monitor common and acute health care problems * conduct health screening procedures * provide health education * teach and advise in family planning and pregnancy care * provide follow-up and referral to physicians and specialists as needed	A CNM may, but is not limited to, perform the overall management of: * normal childbirth * prenatal, intrapartal care * gynecological care and family planning * primary care of adolescent to elderly women - histories and physical exams - routine diagnostic studies - prescribe medications and therapies - diagnose, treat and monitor common and acute health care problems - conduct health screening procedures - provide health education - provide follow-up and referral to physicians and specialists as needed	The scope of practice of a PA corresponds to the supervisory physician's practice services. A PA may, but is not limited to, perform any of the following services: * histories and physical exams * routine diagnostic studies * perform procedures, i.e. suturing, casting, and minor office surgery * diagnose, treat and monitor common and acute health care problems * conduct health screening procedures * provide health education * teach and advise in family planning and pregnancy care * provide follow-up and referral to physicians and specialists as needed
Collaboration & Supervision	NPs in Wisconsin practice with the "general supervision" of a physician when performing medically-delegated acts. Responsibilities of the physician include: * collaborate on written practice guidelines * available for consultation for deviations from normal * no physician presence needed at site of practice * when performing nursing services, NPs practice independently	CNMs in Wisconsin practice with the "general supervision" of a physician trained in obstetrics. Responsibilities of the physician include: * collaborate on written practice guidelines * available for consultation or emergencies for deviations from normal and assume responsibility of any medical procedures necessary in nurse-midwifery practice, i.e. forcept delivery, c-section * enter into a formal written agreement with a CNM which outlines: - protocols and referral procedures - identification of health care facilities - guidelines for annual review - no physician presence needed * when performing nursing services at site of practice, CNMs work independently	PAs in Wisconsin practice with the "supervision" of a physician. Responsibilities of the physician include: * establish written guidelines for prescribing and dispensing medications * review written practice guidelines annually with PA * review and countersign patient record prepared by PA within 24 hours * available to PA in person or by electronic communication within 15 minutes of contact * if a PA works at a separate location, the physician must visit the site once a month, review medication orders within 48 hours, and countersign the patient record within 1 week * a physician may share supervision of a PA with several physicians in the same practice setting
Prescriptive Authority	Can be independent practitioners if the following criteria are met: * current RN license * current NP certification * after July 1, 1998, has a MS in nursing or related field * 45 contact hours in pharmacology/therapeutics * passed jurisprudence exam for advanced practice nurse prescribers	Can be independent practitioners if the following criteria are met: * current RN license * current CNM license and certification * after July 1, 1998, has a MS in nursing or related field * 45 contact hours in pharmacology/therapeutics * passed jurisprudence exam for advanced practice nurse prescribers	PAs prepare prescription orders for medication, including controlled substances, according to established written practice guidelines
Types of Certification	Family, Adult, OB/GYN, Women's Health Pediatric, Gerontological, School, Neonatal	CNMs have one type of certification. All CNMs are certified by the American College of Nurse-Midwives.	PAs take a core certification exam as a "generalist." There are extended examinations available in primary care and surgery.

Reprinted with permission from WIS-TREC, Wisconsin Program for Training Regionally Employed Care Providers, a collective partnership of universities, employers, and public and private agencies. Development of this project is made possible by a grant from The Robert Wood Johnson Foundation's new initiative, Partnerships for Training.

Physician Assistants (PAs) Provide Quality Care

Lou Falligant, PA-C, Madison

THE PHYSICIAN ASSISTANT profession is about thirty years old. There are approximately 29,000 physician assistants, or PAs, currently practicing in the US[1] and approximately 600 in Wisconsin. Therefore, it would be uncommon for a physician to have never interacted professionally in medical school, residency programs and practice environments with PAs. The purpose of this article is to present to the physician what a physician assistant is and the relationship between physicians and PAs.

Physician assistants are certified health care professionals who provide medical care with physician supervision. They perform a wide variety of medical and surgical services, as delegated to them by their supervising doctor, that were traditionally provided only by physicians. In fact, the literature indicates that PAs can substitute for physicians anywhere from 75% to 90% of primary care functions.[2] Although they are dependent practitioners, they do exercise a degree of autonomy in the diagnosis and treatment of illness and injury. They can be found practicing in diverse settings -- from remote rural communities to urban cities and from primary care to surgical subspecialties.

Training

The average PA program is over 25 months in length, or another way of looking at it, 108 weeks for the average PA student compared to 153 weeks for the average medical student. The majority of PA students have a bachelor's degree and over four years of health care experience before entering a program.[3] Generally, the first year consists of didactic training in medical science. The second half consists of clinical rotations where the students are involved with direct patient care. PA programs in Wisconsin are located at Marquette University, University of Wisconsin LaCrosse, and University of Wisconsin-Madison.

[PAs] perform a wide variety of medical and surgical services, as delegated to them by their supervising doctor, that were traditionally provided only by physicians.

Upon graduation from an accredited program of instruction, the PA must sit for and pass a national examination developed by the national Board of Medical Examiners and administered by the independent National Commission on Certification of Physician Assistants. (NCCAP). Passage of this examination gives the PA the right to use the designation, PA-C, or physician assistant-certified. In order to maintain this certification, the PA must log a minimum of 100 hours of CME every two years and retake the written examination every six years.

PA practice in Wisconsin is administered by the Medical Examining Board in accordance with the rules promulgated in Chapter Med 8 of the Administrative Code. To be certified as a PA in Wisconsin, the applicant must be a graduate of an approved program and must pass the NCCAP examination. Temporary certification is available for new graduates. Wisconsin PAs are eligible to apply for DEA numbers, and can prescribe most medications, including Schedule III-V drugs. Written protocols are required, and the supervising physician must countersign the patient record. A physician can supervise up to two PAs, and the PA can work in a remote location as long as telecommunication with the supervising physician is available.[4] Please contact the **Medical Examining Board at (608) 266-2812** for more details.

Continued on next page

Falligant is currently a practicing PA and Physician Assistant Supervisor at Dean Medical Center in Madison. After graduating with a bachelor's degree from the University of Wisconsin, he continued his education at Yale University and graduated from its PA program. He is currently completing courses toward a master's degree in health services administration.

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The American Medical Association recently released guidelines for Physician/Physician Assistance Practice. These guidelines are also endorsed by the American Academy of Physician Assistants (AAPA). Copies of the guidelines can be obtained by contacting the **AAPA Public Affairs office at (703) 836-2272, ext. 3505.** You can also visit the AAPA's World Wide Web site through the SMS's Home page at www.wismed.com.

A pediatrics PA examines a child in a hospital.

Quality of Care

Several recent studies have examined the quality of care provided by physician assistants. Sox reviewed data from over one dozen studies on the clinical performance of PAs and concluded that the care they provided was "indistinguishable" from the care provided by the physician.[5] The US Congressional Office of Technology Assessment concluded that "the quality of care by non-physician practitioners is "equivalent" to the quality of comparable services provided by physicians."[6] A recent article in *JAMA* reiterated these findings.[7]

This same article also examined indirect indicators of quality, such as physician acceptance and patient satisfaction; these parameters also reflect PAs in a favorable manner[7]. The US Department of Health and Human Resources' *Physician Assistants in the Workplace Report of 1994* cites a high level of patient acceptance and satisfaction with the care they receive by PAs.[5]

Additionally, a recent report by the American Medical Association regarding PAs employed by solo physicians looked at the effect on physician productivity and other practice characteristics. The findings suggested, "The incentives for employing non-physician practitioners include increases in net income and physician productivity -- office visits per hour, and visits in all settings, both on a weekly and yearly basis. By employing non-physician practitioners, solo physicians were able to expand the scale of their practices and provide greater access to care."[8] Medical Group Management Association reports on a recent study that suggests that although PAs generally do not see as many patients per year as family practice physicians, their "lower average salary and productivity make them economical providers."[9]

In conclusion, physician assistants are providing quality, cost-effective health care with the supervision of physicians. They are dependent health care practitioners as members of the health care team, yet capable of exercising a degree of autonomy in medical decision making. In the provision of quality health care for the citizens of our state, physician assistants are professional assets.

References

1. Annual census data on physician assistants, 1996. Alexandria, VA: American Academy of Physician Assistants 1996.
2. Osterweis M., Garfinkel S. The roles of physician assistants and nurse practitioners in primary care: An overview of the issues. In: Clawson DK, Osterweis M, eds. The roles of physician assistants and nurse practitioners in primary care. Washington, DC: Association of Academic Health Centers; 1993:1-9
3. American Academy of Physician Assistants. Partners in Medicine. Publication #101. Alexandria, VA: American Academy of Physician Assistants; 1995.
4. Chapter Med 8. Physician Assistants. Wisconsin Administrative Code. Department of Regulation and Licensing. Medical Examining Board. Register, October, 1996, No. 490.
5. Health Resources and Services Administration, Bureau of Health Professions. Physician assistants in the health workforce 1994. Washington, DC: US Department of Health and Human Services; 1994:38-55.
6. United States Congress, Office of Technology Assessment. Nurse practitioners, physician assistants, and certified nurse midwives; a policy analysis. Washington, DC: Government Printing Office; 1986.
7. Jones PE, Cawley JF. Physician assistants and health system reform. *JAMA*. 1995;271:1266-1272.
8. Wonzniak G. Physician utilization of non-physician practitioners. In: Gonzolas M, ed. Socioeconomic characteristics of medical practice 1995. American Medical Society, Center for Health Policy Research; 1995:15-21.
9. Medical Group Management Association. Physician compensation and production survey; 1994 report based on 1993 data. JAAPA. 1995; 3:92.❖

Advanced Practice Nurses

Ann E. Conway, RN, MSN, MPA, Madison

ADVANCED PRACTICE nurse (APN) is an umbrella term that designates a registered nurse (RN) who has met advanced educational and clinical practice requirements beyond the two to four years of basic nursing education required of all registered nurses. There are four categories of APNs: nurse practitioner (NP), certified nurse midwife (CNM), clinical nurse specialist (CNS) and certified registered nurse anesthetist (CRNA).

Nurse Practitioner: At least five universities in Wisconsin offer NP educational programs that confer a master's degree in a specialty area such as adult, family or pediatric health care. In addition, most are certified in a specialty area such as family, adult, OB/GYN, women's health, pediatric, gerontological, school, or neonatal. NPs provide health education, perform histories and physical exams; diagnose, treat and monitor common and acute health care problems. NPs work in clinics, nursing homes, hospitals, or their own offices and are qualified to handle a wide range of health issues and illnesses.

Certified Nurse Midwife: Marquette University offers the only master's degree program in nurse midwifery in Wisconsin. Not all CNMs in Wisconsin are master's prepared, but they are all licensed as CNMs and have received national certification. (See page 25, *Nurse-Midwife and Physician Collaboration: Improving Opportunities to Work Towards a Healthier Wisconsin*.)

Clinical Nurse Specialists: University educational programs prepare registered nurses at the master's and doctoral levels to work in clinical settings, community or office-based settings and hospitals. (See *Clinical Nurse Specialists*, page 19.)

Certified Registered Nurse Anesthetist: A CRNA is a registered nurse with at least one year of critical care nursing and two to three years of additional education and national certification. CRNAs practice in all but two counties in Wisconsin where anesthesia services are provided. In a number of hospitals, especially in rural areas, CRNAs are the sole providers of anesthesia services in their institutions. CRNAs work in almost every setting in which anesthesia is given -- operating rooms, dentist's offices and ambulatory surgical settings.❖

Advanced Practice Nurse Prescribers

CURRENTLY THERE ARE about 650 Advanced Practice Nurse Prescribers (APNPs) in Wisconsin. To be certified as an APNP by the Board of Nursing a nurse must:

1. Be a registered nurse in Wisconsin;
2. Be certified by a national certifying body approved by the Board of Nursing as a nurse practitioner, certified nurse midwife , certified registered nurse anesthetist or clinical nurse specialist;
3. For those who receive national certification, hold a master's degree in nursing or a related health field after July 1, 1998;
4. Complete 45 contact hours in clinical pharmacology/therapeutics; and
5. Pass a jurisprudence examination.

In addition, the APNP is expected to collaborate with physicians or other health care professionals as needed, but can prescribe without supervision.

APNPs can issue prescriptions that are appropriate to the APNPs scope of practice but cannot prescribe Schedule I controlled substances. Prescriptions issued by APNPs must contain the date of issue; the name and address of the patient; the name, address and business telephone number of the APNP and the APNP's signature.

In 19 states advanced practice nurses have independent prescriptive authority. The law that gives Wisconsin nurses independent prescriptive authority is *1993 Act 138*, signed by Governor Thompson on March 8, 1994. In late 1994 and early 1995, the administrative rules were approved by both the Senate and Assembly committees and adopted by the Board of Nursing. The rules went into effect on March 1, 1995. (Registered nurses who are not APNPs may continue to prescribe as a delegated medical act.)

For additional information see page 51, *Scope of Practice and Medical Delegation*, or see Chapter N 8 of the Board of Nursing's Administrative Code.❖

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Nurse Practitioners: The American Experience

Barbara L. Nichols, RN, MS, FAAN, Madison

The Original Concept of Nurse Practitioner

This paper presents a kaleidoscopic overview of the introduction and development of the nurse practitioner's role in the US.

In short, the nurse practitioner's role was built on the nursing profession's historic concepts and goals, while developing a new role futuristically designed within the parameters of the nursing profession.

Emerging from the social unrest of the sixties, in less than three decades and despite enormous resistance, the nurse practitioner model of practice has become fully established in the US. The architects of the concept, Loretta Ford, a doctorally-prepared nurse, and Henry Silver, a physician, envisioned expanding the clinical role of Master's-prepared public health nurses.

The concept created in 1965, and still valid in 1997, was to expand the scope of nursing practice without altering its essential nature. The intent of the first nurse practitioner project established at the University of Colorado, School of Nursing, was to prepare a highly skilled academically educated community health nurse specialist.[1,2,3] Thus, the traditional nursing role was expected to be maintained and improved by the addition of these new capabilities.

Shortage of Physicians Fuels Nurse Practitioner Profession

The social climate in America in the late sixties and the early seventies focused on the need to provide increased access to health services for all citizens. A shortage of physicians existed, and nursing education was moving from hospital schools to colleges and universities. Physician assistants were established in response to the doctor shortage and were quickly confused with the nurse practitioner.

Technological advances demanded expanding the numbers and different kinds of health workers to meet the public outcry for increased access to health care.[4] The time was ripe for innovation in nursing education and practice.

A review of the health professions literature reveals that the evolution of the nurse practitioner role has developed in three stages: "Role Creation and Introduction," "Role Definition and Legitimatization," and "Role Consolidation and Maturation."[5] Each will be briefly described.

Both [nurses and physicians] viewed any collaborative effort between medicine and nursing, with respect to the nurse practitioner's role development, with alarm and suspicion.

Stage I: Role Creation and Introduction

This stage of development of the concept existed from 1965 through 1970. The program conceived at the University of Colorado began modestly as a demonstration project to determine the safety, efficacy, and quality of a new model of nursing practice.

Namely, the pediatric nurse practitioner role. Funding initially sought from the federal government was denied, with initial funds coming from private foundations. The first name selected for the new role was pediatric public health nurse practitioner. Because the name was lengthy and cumbersome, the public health portion of the name was dropped.[6]

Hostility toward this new role was rampant among both nurses and physicians. Nursing leaders described the role and function of nurse practitioners as "not nursing" but as a "physician substitute." However, physicians described the role and function as "bad doctoring."

Nurses feared that physicians would control and devour nursing education and practice, while physicians were aghast at the thought of nurses functioning in an expanded role not under their direction. Both viewed any collaborative effort between medicine and nursing, with respect to the nurse practitioner's role development, with alarm and suspicion.[7,8,9]

Nurses by and large viewed the name "nurse practitioner" with disdain. They stated that the title was "ambiguous and misleading." On the other hand, organized medicine labeled the nurse practitioner as a physician extender or as a mid-level practitioner implying that the nurse was in some way appended to medicine.

Although there were unanswered questions and unresolved issues, because of the growing shortage of physicians, organized medicine half heartedly endorsed nurse practitioner and physician assistant training programs as a means of expanding physician services by the use of these two practitioners.[10]

Nursing spent an inordinate amount of time and energy attempting to explain the difference

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in philosophy, preparation, practice, professions, licensure, and accountability that differentiates nurse practitioners from physician assistants that continues today. Within nursing there was no consensus regarding educational standards, certification, accreditation, and the subsequent rules and regulations which govern preparation and practice for nurse practitioners.[11,12]

To sum up, during Stage I of nurse practitioner development, both the concept and the practitioner were perceived as deviant.

Stage II: Role Definition and Legitimatization

The second stage of development, "Role Definition and Legitimatization," lasted from 1971 through 1981. Although the initial goal of the first nurse practitioner project was to prepare nurses on the Master's level for expert practice, teaching, and clinical research, societal demands for health care services modified that goal.

Short-term continuing education programs to prepare nurse practitioners were funded by the federal government and others. The success of these projects encouraged the proliferation of programs. Soon there were programs for family nurse practitioners, adult nurse practitioners, and school nurse practitioners.

Hospitals, clinics, neighborhood health centers, university nursing and medical schools all vied for funds from federal sources and foundations. Program offerings and educational patterns varied from short term continuing education programs of two months to Master's programs of two years. Many nursing and medical specialties began to educate nurse practitioners.[13,14,15]

Physician assistants also began to specialize. Many of the short-term programs lost sight of the initial goal of integrating the nurse practitioner concepts into the degree curricula. There was increasing concern with the legal status of nurse practitioners with the reform of nurse practice acts.[16] There was increasing debate over the issue of reimbursement of nurse practitioner services as patient care services, per se, rather than a set of activities provided "incidental to" medical consultation.

During this period, accreditation of programs and certification standards for nurse practitioners were established. Research projects were also numerous on the role of the nurse practitioner. Many investigators compared the clinical judgments made by nurse practitioners to those of physicians, and also to physician assistants in terms of providing care, the acceptance and compliance of patients, and the development of peer relationships with physicians and other nurses.[16,17,18]

Becoming a nurse practitioner became a legitimate and important means of gaining professional status in nursing.

To sum up this period, the competence of the nurse practitioner to assess and manage health problems was ascertained. Extensive surveys and profiles on the programs and performance of nurse practitioners were done.

Nursing as a profession embraced and incorporated nurse practitioner programs, accreditation of programs, and certification of graduates were established under the control of nursing. Becoming a nurse practitioner became a legitimate and important means of gaining professional status in nursing. So as Sultz stated at the end of his study of nurse practitioners, "The nurse practitioner is alive and well and flourishing throughout the United States."

Stage III: Role Consolidation and Maturation

The third stage of the development, "Role Consolidation and Maturation," occurred from 1982 to the present.

It emphasized and validated the quality of care provided by nurse practitioners, their influences upon employment settings, costs, distribution, and education.

During this period, research into issues of legal control, costs, supply, practice, and distribution were completed. Nurses functioning in expanded roles became described as advance practice nurses. (See related article, *Advance Practice Nurses* on page 15.)

However, despite the tremendous progress, with regard to the evolution of the nurse practitioner's role, four barriers of major importance exist for full utilization of advance practice nurses. These are: 1) legal constraints (see *Scope of Practice and Medical Delegation*, page 51), 2) reimbursement, 3) malpractice insurance, and 4) institutional privileges.

Reimbursement constraints relate to federal and insurance policy and practice that reimburse comparable health care services at different levels dependent on professional title and/or geographic location. This may be so, even though the services provided are within the scope of practice of the advance practice nurse.

Malpractice insurance has not been made available in certain periods. For example, certified nurse midwives had difficulty obtaining professional liability insurance during 1984 and 1986. Such insurance is critical because of the high-risk nature of CNM practice. Limits on the coverage per claim are substantially lower than the coverage available for physicians. These limits have reduced job opportunities for certified nurse mid-

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wives because physicians are unwilling to collaborate with CNMs in the absence of higher coverage, and because hospitals will not grant them privileges if their coverage is inadequate to meet institutional requirements for minimum amounts.

In many instances, in numerous communities, institutional privileges, especially admitting privileges have been difficult to get. Such privileges are essential for some advance practice nurses, such as certified nurse midwives, gerontological nurse practitioners, and psychiatric nurse practitioners who may need to admit patients for acute episodes.[19,20]

To sum up this third stage of development, the advance practice nurse has been a particular target in inter-professional conflicts with medicine, especially in the delivery of primary care. Be that as it may, a new and deviant idea in 1965 has become one of the recognized roles in nursing worldwide.

Conclusion

Extensive documentation on every aspect of the nurse practitioner's preparation and performance exists. In fact, no role in American nursing has had as thorough an investigation and description as has the role of the nurse practitioner.

The primary role of advance practice nurses has emerged to be screening, physical and psychosocial assessment, health promotion, health education, patient teaching, prescriptive authority, and counseling and coordination of care. Elements within the historic and futuristic parameters of nursing practice.

The development of the nurse practitioner's role in America has been strong enough to have survived the attacks of the past, politically knowledgeable enough to overcome present threats, and committed enough to ensure the future viability and institutionalization of the concept in education and practice.

References

1. Ford, Loretta C., Marguerite Cobb, and Margaret Taylor. Defining Clinical Content, Graduate Nursing Programs, Community Health Nursing. Boulder, Colorado: Western Interstate Commission for Higher Education, 1967.
2. Ford, Loretta C., and Henry K. Silver. The Expanded Role of the Nurse in Child Care. Nursing Outlook (September, 1967), Vol 15, 43-45.
3. Ford, Loretta C. "A Nurse for All Settings: The Nurse Practitioner." Nursing Outlook, 27(8):516, August 1979.
4. Nurse Practitioners and the Expanded Role of the Nurse: A Bibliography. Nurse Planning Information Series, No. 5, U.S. Department of Health, Education and Welfare, PHS, H.R.A., Bureau of Health Manpower, Division of Nursing, Hyattsville, Maryland. DHEW Publication No. (HRA) 79-20, HRP 0500601, November, 1978, 247.
5. Weston, Jerry L. What's Ahead for Nurse Practitioners and Physician Assistants? HCFA Forum (December 1980), 2-6.
6. HEW Secretary's Committee to Study Extended Roles for Nurses. Extending the Scope of Nursing Practice. Washington, DC: Department of HEW [HSM 73-2037], 1971.
7. Secretary's Committee to Study Extended Roles for Nurses, op. cit., 8.
8. Lewis, C.E. and Cheyovich, T. Who is a Nurse Practitioner? Processes of Care and Patients' and Physicians' Perceptions. Medical Care 14:365-371, (April) 1975.
9. Lewis, D. The Place of the Clinic in Medical Practice. Journal American Medical Association 100: 1905-1910, 1933.
10. Physician Extenders: Their Current and future role in Medical Care Delivery. The Congressional Budget Offce, Congress of the United States, April, 1979.
11. Winterton, Marilyn Edmunds. Evaluation of Nurse Practitioner Effectiveness: An Overview of the Literature. Evaluation and the Health Professions 1:1 (Spring 1978), 69-81.
12. Diers, Donna and Susan Molde. Some Conceptual and Methodological Issues in Nurse Practitioner Research. Research in Nursing and Health 2 (1979), 73-82.
13. Sultz, Harry A., O Marie Henry, and Judith A. Sullivan. Nurse Practitioners: U.S.A. Lexington, Massachusetts: Lexington Books, 1979.
14. Sultz, Harry A., Marie Zielenzy, Jane Matthews, and Louis Kinyon. Longitudinal Study of Nurse Practitioners. Phase I. DHEW publications. Hyattsville, Maryland, May 1980.
15. Sultz, Harry A., Marie Zielenzy, Jane Matthews, and Louis Kinyon. Longitudinal Study of Nurse Practitioners. Phase III. DPH Publications No. HRA 80-2, Hyattsville, Maryland, May 1980.
16. Technologies for Forecasting Physician Supply and Requirements. Health Program, Office of Technology Assessment, U.S. Congress, March 1980.
17. Scheffler, R.M., Yoder, S.G., Weisfeld, N. and Ruby, G. Physicians and New Health Practitioners: Issues for the 1980s. Institute of Medicine, National Academy of Sciences, Washington, D.C., May 1979.
18. Lewis, C.E. Final Report, U.S. Public Health Services Grant NU 00145. The Dynamics of Nursing in Ambulatory Care. National Center for Health Services Research, Hyattsville, 1968.
19. Hegyvare, S.T., (1992). Educating Nurses for New Practice Environments. C. Everts, P.P. Bosomworth & M. Osterwies (eds.). Human Resources for Health: Defining the Future (p p. 133-140). Washington, D.C.: Academic Health Centers.
20. Shugars, D.A., O'NEIL, E.H., & Bader, J.D., (Eds.), (1991). Health Professional Schools: A Report of the Pew Health Professions Commission, Duke University Medical Center. ❖

Clinical Nurse Specialists

Catherine Berry, MSN, RN, CNS, Madison

Clinical Nurse Specialists (CNSs) are Registered Nurses with advanced education and clinical experience. Many have been recognized by a national certifying agency in a specialized area of nursing practice.

Areas of specialty may include neonatal, pediatric, adult, geriatric, obstetric, and gynecology.

Clinical subspecialties may include diabetes, critical care, cardiovascular, lipid management, respiratory, surgical, orthopedics, neuroscience, AIDS, psychiatric, oncology, medical, chronic illness, rehabilitation, wellness, and transplant.

Practice settings may include hospitals, long-term care facilities, clinics, prisons, community health settings, schools, public health agencies, home health care agencies, occupational health offices, HMO's and independent consulting practices.

History of CNS Specialty

The first program to prepare Clinical Nurse Specialists at the Master's level began in 1954 when Rutgers University initiated a curriculum for psychiatric nurses.[1] The American Nurses Association (ANA) clearly defined Clinical nurse specialists in 1980 in the Social Policy Statement: A nurse specialist provides an expert approach to health care focused on a refined body of knowledge and specialized practice competencies.[2] Masters study includes both clinical and theory to prepare the graduate for functioning as clinician, consultant, educator, and researcher.

In 1983, a separate Council of Clinical Nurse Specialist was formed within ANA. This council identified that by 1986 more than 19,000 registered nurses functioning as CNSs within the United states.[3] The Council of Clinical Nurse Specialists and the Council of Primary Care Practitioners united, becoming the Council of Nurses in Advanced Practice in 1991.[4]

According to 1993 statistics from the American Nurses Association (ANA), primary care is delivered by more than 100,000 Advanced Practice Registered Nurses (APRNs) including approximately 50,000 Nurse Practitioners, approximately 6,000 Certified Nurse Midwives and approximately 56,000 Clinical Nurse Specialists.[5] The October, 1995 Wisconsin Clinical Nurse Specialist Directory listed more than 600 individuals.[6]

A CNS earns a Master's degree and is an expert in managing patient care in a specialized area.

The quarterly journal, *Clinical Nurse Specialist*, serves as a forum for the exchange of ideas. A Clinical Nurse Specialist is an expert clinician, a consultant, an educator, and researcher.[7]

"Expertise in clinical decision making and an understanding of functioning within the health care system enable the CNS to assure quality nursing care for clients."[8]

CNS as Consultant, Educator, Researcher

The consultant role may include client-based, staff-based, or program-centered issues. The educator role may include clients, families, groups (colleagues, peers, other care providers), and communities. The research role focuses on improvements to client-based practice.

CNSs provide both direct and indirect care. Assessment, diagnosis, planning, therapeutic intervention, and evaluation are examples of direct care. Indirect care may involve education and consultation services that CNSs provide to the care providers resulting in enhanced patient care.[9]

Clinical Nurse Specialists can be population-based as defined by a medical or nursing diagnosis or a disease-specific problem. The Population Based Clinical Nurse Specialists may be employed by the hospital, a clinic or physicians. Unit Based Clinical Nurse Specialists are employees of the hospital. Joint Practice Clinical Nurse Specialists are employed by a practice corporation or institution. Joint practice "increases mutual understanding and leads to optimal patient care, as together the nurse and physician provide more comprehensive care than either can provide alone."[10] CNSs share their unique skill and perspectives with other health care providers to enhance the quality of patient care.

Following are specific examples of Wisconsin CNSs in a variety of practice settings.[11]

Hospital CNS

Bev Weston has been a CNS at Saint Luke's Medical Center in Milwaukee for nine years. Her specialty is working with people who have kidney disease, including those who may need dialysis. Part of her role is teaching patients about kidney disease and choosing their treatment. Since kidney disease is usually a long-term

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condition, Bev has the opportunity to know her patients well and follow their progress over months and even years. Bev communicates with dialysis centers around the city to meet her patient's needs. In addition to her patient care focus, Bev works to educate staff, conduct research, serve as a consultant in her area of specialty, and to perform administrative and project duties to help the nursing department function.

Clinic CNS

Linda Culhane is a CNS in the Geriatric Institute at Sinai Samaritan Medical Center. She coordinates a team of health care workers planning care for older adults in the clinic. Linda frequently sees clients over several years as she monitors their chronic health problems such as urinary incontinence, skin care issues, and disabling diseases such as arthritis. A large portion of Linda's role is education of her clients. Linda works closely with the clinic physicians, adding continuity and a caring component to the clinic setting.

Long-Term Care CNS

Pat Borgman is the CNS at Lutheran Home of Oconomowoc, a large nursing home and retirement complex. One aspect of Pat's work is helping residents adjust to the changes that go along with giving up one's home due to age and infirmity. She works with residents throughout the Lutheran Home campus, including those persons residing in the retirement apartments. Pat works with residents to keep them well, through health promotion activities and monitoring. In addition to her work with residents, Pat functions as the Lutheran Home's occupational health nurse and coordinator of the nursing quality assurance program.

Occupational Health CNS

Cindy Schaefer has been an Occupational Health Nurse Specialist at Wisconsin Electric for four years. This role is continuing to develop. Cindy acts as a consultant to business units and departments within Wisconsin Electric on issues such as health and safety. She develops and provides programs which educate employees about ways to promote and maintain healthy behaviors both on and off the job. She counsels employees on these duties on a one-on-one basis, as well. Direct nursing care activities include: pre-placement physicals, screening exams related to work exposures or need to use special protective equipment like respirators, health check-ups for employees returning to work following an illness or injury, nursing care for employees ill or injured at work, and routine monitoring such as blood pressure checks.

CNS as a Small Business Owner

Kaye Dietrich is a community health nurse CNS with her own small business, Keil Community Health Resources. Clients are interviewed to determine health care needs and resources are then identified. A plan for care is developed with the client and the care givers. Kaye has noted that people at home often have trouble remembering to take their medication. She became a local distributor for a medication dispensing system which reminds people with a signal when it is time to take their medication. Kay markets the medication dispensing system over a wide area, and over the past two years she has learned much about operating her own business.

Private Practice CNS

Beverly Sigl Felton is a CNS working to meet the mental health needs of older people. Bev has her own private practice specializing in the care of older people with cognitive decline, mental health problems, dementia, complex medical problems, and those who are taking many medications. She serves people in the community, housing complexes, nursing homes, and adult day care centers. Bev has also become an Advanced Practice Nurse Prescriber, which enables her to prescribe medication for her patients.

References

1. National League for Nursing. (1958). *The educational preparation of the clinical nurse specialist in psychiatric nursing.* New York: National League for Nursing.
2. American Nurses' Association (1980). *Nursing: A social policy statement.* Kansas City, MO: American Nurses Association.
3. American Nurses' Association (1986a). *Clinical nurse specialists: Distribution and utilization.* Kansas City, MO: American Nurses Association.
4. Hawkins, J., Rafson, J. (1991). Council of nurses in advanced practice established. *Synergy* Kansas City, MO: American Nurses' Association Council of Nurses in Advanced Practice.
5. American Nurses' Association (1993). *Nursing Facts: Advanced Practice Nursing.* Washington, DC: American Nurses Association.
6. Wisconsin Council of Clinical Nurse Specialists. (1995). *Wisconsin Clinical Nurse Specialist Directory.* Madison, WI: Wisconsin Council of Clinical Nurse Specialists.
7. American Nurses' Association (1986b). *The role of the clinical nurse specialist.* Kansas City, MO: American Nurses Association.
8. Werner, J.S., Bumann, R.M., & O'Brien, J.A. (1988). Clinical nurse specialization: An annotated bibliography. Clinical Nurse Specialist, 2,15.
9. Sparacino, P.S., Cooper, D.M., & Minarik, P.A.(1990). *The Clinical Nurse Specialist Implementation and Impact.* Norwalk, CN: Appleton & Lange.
10. Dressler, D. (1994). The Critical Care Clinical Nurse Specialist in Joint Practice with Physicians. *Clinical Nurse Specialist Role in Critical Care.* Philadelphia, PA; W.B. Saunders Company.
11. Harter, M., Piacentine, L. (1996). *Clinical Nurse Specialists Provide Expert Nursing Care.*

- *Wisconsin Regulatory Digest.* Madison, WI: Department of Regulation and Licensing, 7,2.❖

Professional Nurse Staffing in Hospitals

Report 11 of the AMA Board of Trustees (I-96), Executive Summary

At the AMA's 1996 Annual Meeting, the House of Delegates adopted Resolution 815 "Profession Nursing Staffing of Hospitals" submitted by the Organized Medical Staff Section. Resolution 815 asked the AMA, in conjunction with state medical societies, nursing organizations, and hospital associations to evaluate inpatient staffing levels for licensed professional nurses as a priority endeavor. The evaluation called for including the functioning, use and supervision of unlicensed assistive personnel (UAPs) and their impact on hospital care. The evaluation was conducted through a review of all materials, policies and comments submitted by several nursing associations, hospital, and health care organizations, and a survey of state medical societies to estimate their level of concern. A review of the literature and several opinion surveys and legislative initiatives by organized nursing were included.

Non-physician providers spend time teaching preventative medicine and educating patients.

Quality of Care

The effects on quality of care of replacing RNs with less-prepared personnel during reconstruction of hospital environments is unclear and difficult to separate from other changes that are occurring in the health care system. The reduction of the number of registered nurses from 95% of nursing staff to 75% is the inevitable result of cost-conscious health care systems and incremental health care reform. The evaluation substantiated that all facilities have different needs based on the acuity of patient care and the characteristics of patient populations. The review determined that rigid standards for nurse staffing levels are unnecessary and inappropriate.

Medical societies, on the whole, show increased anxiety on the part of physicians about quality of care but it was only occasionally associated directly with nurse staffing problems and the supervision of less-prepared personnel by nurses.

The evaluation substantiated that increased communication between physicians and nurses, especially in critical care units, enhanced quality of care, and that the hospital medical staff is influential in supporting nursing staff efforts to safeguard patient safety, especially during transitional periods. Most physicians and nurses agree that there is a role for assistive personnel on the health care team, but it is a role that must be supervised and monitored so that the use of less-prepared personnel is appropriate and safe.

This report's recommendations speak to six ways that medical and nursing staff can work together in the hospital environment to assure quality of patient care. They include closely monitoring quality standards to help guide hospital administrations toward the best use of limited resources; developing in-service education programs in accord with established or developing guidelines; encouraging the use of identification badges that provide the names and credentials of all care givers in hospitals visibly to patients; and seeking methods to work with hospital administration during reconstruction of hospital environments and safety of patient care.

Recommendations:

The Board of Trustees recommends that the following recommendations be adopted and the remainder of this report be filed.

1. That the AMA encourage medical and nursing staffs in each facility to closely monitor the quality of medical care to help guide hospital administrations toward the best use of resources for patients;

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2. That the AMA encourage medical and nursing staffs to work together to develop and implement in-service education programs and promote compliance with established or pending guidelines for unlicensed assistive personnel and technicians that will help assure the highest and safest standards of patient care;

3. That the AMA encourage medical and nursing staffs to use identification mechanisms, e.g., badges, that provide the name, credentials, and/or title of the physicians, nurses, allied health personnel, and unlicensed assistive personnel in facilities to enable patients to easily note the level of personnel providing their care;

4. That the AMA encourage medical and nursing staffs to develop, promote, and implement educational guidelines for the training of all unlicensed personnel working in critical care units, according to the needs at each facility;

5. That the AMA encourage medical and nursing staffs to work with hospital administrations to assure that patient care and safety are not compromised when a hospital's environment and staffing are restructured; and,

6. That the AMA: (a) convene a workgroup of nursing organizations and other interested parties to develop guidelines for reasonable staffing levels based on currently available information; (b) seek foundation support for further research on the effects of nurse staffing levels on the quality of medical care; and (c) develop a strategy for continued monitoring and evaluation of nurse staffing levels.❖

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Guidelines for the Utilization of Unlicensed Assistive Nursing Personnel

Wisconsin Organization of Nurse Executives; Wisconsin Council of Nurse Managers; Wisconsin Nurses Association; Wisconsin Health and Hospital Association; and the State Medical Society of Wisconsin

Purpose

The following guidelines are intended to assist healthcare organizations in the appropriate use of unlicensed assistive nursing personnel. These guidelines are based on two guiding principles: first, that patients in all settings must be assured high-quality, professional nursing care; and second, that this care must be provided in a safe and cost-effective manner. The appropriate use of assistive personnel can simultaneously improve the quality of care and reduce costs by allowing the registered nurse to focus on the professional aspects of patient care, including assessment, planning, care coordination, patient and family education, and evaluation of outcomes.

These guidelines have been endorsed by the Wisconsin Organization of Nurse Executives, the Wisconsin Council of Nurse Managers, the Wisconsin Hospital Association, the Wisconsin Nurses Association, and the Wisconsin State Medical Society. Our intent is to make this document widely available to healthcare organizations for their use as an educational tool and suggested staffing guideline.

Definitions

The following terms are defined in this document in order to assure a common understanding:

Unlicensed Assistive Personnel - Unlicensed Assistive Personnel (UAP) are individuals who are trained to function in an assistive role to the registered professional nurse in the provision of patient/client care activities as delegated by and under the supervision of the registered professional nurse."[1]

The certified nursing assistant is the most common example of the UAP: other examples include (but are not limited to) home health aides and patient care technicians. The term "unlicensed assistive personnel" does not include members of the client's immediate family, guardians, or friends.

Delegated Nursing Act - The registered nurse may delegate acts within the scope of professional nursing to a licensed practical nurse or to a less-skilled assistant, provided the RN meets the following ***delegation criteria:***

- Delegates tasks that are commensurate with the educational preparation and demonstrated abilities of the person supervised.
- Provides direction and assistance to those supervised.
- Observes and monitors the activities of those supervised.
- Evaluates the effectiveness of acts performed under supervision.[2]

Wisconsin Board of Nursing - According to Wisconsin Statute 441, the practice of nursing is licensed and regulated by the Wisconsin Board of Nursing.

Direct/General Supervision - Direct supervision means immediate availability to continually coordinate, direct, and inspect firsthand the practice of another. General supervision means to regularly coordinate, direct, and inspect the practice of another.[3]

LPN indicates a licensed practical nurse licensed under Ch. 441 stats.

CNA as defined in Ch. 146.40 (d) is an unlicensed individual who performs routine patient care duties delegated by a registered nurse. The registered nurse supervises the individual for the direct health care of a patient of resident.

Appropriate Role

A registered nurse assesses the patient's need for nursing care in all settings where patient care is provided. While nursing acts may be legally and appropriately delegated, the professional functions of assessment and evaluation can only be done by a registered nurse. Other qualified staff members can assist the registered nurse in any delegated aspects of the assessment process, but are not responsible to synthesize the data and make a clinical judgement. Delegated aspects of the assessment process are carried out in accordance with applicable law and regulations, and established hospital policies and procedures.[4]

While employers may suggest which nursing acts should be delegated or to whom the delegation may be made, it is the registered nurse who is ultimately responsible for making the decision whether, and under what circumstances, the delegation occurs. The institution has the right to establish job descriptions, policy and procedures that may limit practice. If the registered nurse decides that the delegation may not appropriately or safely take place, then he

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or she has the responsibility not to delegate the specific act in question. If the RN decides that the delegation may not appropriately or safely take place, but makes the delegation anyway, he or she may be disciplined by the Board of Nursing for negligent practice, as defined in Section N 7.03, Wisconsin Administrative Code.

Additional responsibilities for unlicensed assistive personnel are assigned by the RN and other licensed healthcare professionals based upon the individual UAP's training, education and competence.

Delegated tasks are identified based on the needs of the patient population and are listed in the specific skills inventory or competency check list of the unlicensed assistive personnel.

Registered nurses understand the general principles underlying the skills of the personnel they supervise. Unlicensed assistive personnel who have been appropriately trained are legally responsible for the correct performance of the task and will be held accountable. The RN can be held responsible if tasks are inappropriately delegated. Both parties are responsible for the communication, both verbal and written, associated with their role.

Examples of these delegated tasks vary from one care setting to the next, therefore relevant practice acts must be consulted and adhered to as plans for unlicensed assistive personnel are designed. The RN is always responsible for the overall nursing assessment.

Training

Organizations that employ unlicensed assistive personnel are responsible for establishing clear job descriptions that delineate roles and tasks. The organization is also responsible for providing training based on the unlicensed assistive personnel job description, and preceding each new skill each person is assigned. Existing educational institutions is may be utilized where possible. If outside education is not feasible, in-house training must include the determination of essential elements for the performance of each task, training and demonstration of learning for each of these critical elements, and a method for the determination of competence during the clinical practicum part of the training period. Once each person has achieved competence for a particular task, that person can be assigned to complete that task under the supervision of an RN. These new competencies should be included in the regular assessment of personal competence.

Conclusion

It is through our united efforts that we will assure high-quality, cost-effective patient care in all settings throughout Wisconsin. We hope this document will serve to educate and guide staffing decisions where needed.

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References

1. "Registered Professional Nurses and Unlicensed Assistive Personnel," American Nurses Association, January 1994
2. Wisconsin Statutes, Section 441.11(4), and the Wisconsin Administrative Code, Section N6.03(3).
3. "Standards of Practice for Registered Nurses and Licensed Practical Nurses," Wisconsin Administrative Code, Board of Nursing, Chapter N6, June 1993.
4. "Assessment of Patients," Standard PE.4.3, JCAHO Accreditation Manual for Hospitals, 1995.❖

Nurse-Midwife and Physician Collaboration: Improving Opportunities to Work Towards a Healthier Wisconsin

Leona VandeVusse, PhD, CNM and Lisa Hanson, DNSc, CNM, Milwaukee

Introduction

The next millennium is projected to be an environment in which multidisciplinary health care practice will increasingly become the norm. There is a history of collaborative practices between certified nurse-midwives (CNMs) and physicians (MDs) that will assist both groups to provide needed services in the future. In this article, the roles of these two professions are highlighted and the nurse-midwifery educational program in Wisconsin is explained. In addition, the history of the collaborative efforts among these maternity providers are summarized, comparative research on physicians and CNMs is noted, and one potential barrier to collaborative practice, the myth of vicarious liability, is described. Physicians should not have increased liability when working with CNMs or other advanced practice nurse providers.

Nurse-Midwifery Defined

In a previous article, Glasser et al.[1] provided an excellent introduction to CNMs, including a synopsis of the history of the profession in the US, beginning in 1925. CNMs are registered nurses (RNs) who have completed an accredited educational program which includes intensive supervised clinical experiences. The education is often at the graduate level. CNMs must also have successfully passed the national certification examination of the American College of Nurse-Midwives (ACNM) Certification Council. In the state of Wisconsin, all conditions must be met, and the CNM holds both RN and nurse-midwife licenses.

The scope of practice of nurse-midwifery began as work with women and their families that centered primarily around the maternity cycle. It focused initially on prenatal services, labor, delivery, newborn stabilization, and the postpartum period, with family planning services.

The scope of practice of nurse-midwifery began as work with women and their families that centered primarily around the maternity cycle.

Early in the development of the nurse-midwifery profession in the US, supportive physicians were involved. There were physicians on the Kentucky Committee for Healthy Mothers and Babies that advised the Frontier Nursing Service, the first nurse-midwifery care provided in the US. This service began in 1925. In 1931, Dr Lobenstine was influential in establishing the first clinic for CNMs practice in New York City, as well as the first nurse-midwifery educational program. These are only two of many examples of the early collaboration between MDs and CNMs.

Expanding Role

In the last decades, the CNM scope of practice has expanded to provide more continuous, less fragmented services for women throughout the life span. It now includes well women gynecology and primary care. Recently, women's health (or obstetric-gynecologic) nurse practitioners (NPs) have paralleled a similar development. These two advanced practice nursing groups (CNMs and women's health NPs) are similar, except that CNMs also provide labor and delivery services, including managing births. Further, CNMs share history and lineage with other midwives. Although midwifery is not the norm in the US, it is certainly the international norm for maternity care.

Nationally, CNMs are the documented birth attendants for approximately 5% of the deliveries in the US.[2] Ninety-five percent of these births occur in hospitals. In Wisconsin, CNMs are the birth attendants for approximately 2.6% of the births,[3] all of which occurred in hospitals.

Midwives in Wisconsin

Glasser et al.[1] observed that the numbers of CNMs were not adequate to meet the needs of women and infants in the state of Wisconsin. For example, they noted that there were 11 counties without practicing obstetricians and that there was also a reduction in family practice physicians providing obstetric services. Therefore, Glasser et al. proposed that a nurse-midwifery educational program should be implemented in Wisconsin. This recommendation became a reality in 1993, when a two year, full-time, Master's

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degree granting program that is fully accredited by the ACNM was established at Marquette University College of Nursing. Since then, 11 participants have graduated, all of whom have passed the national certification examination and are CNMs. As a direct result of the program, six graduates have initiated new practices in collaboration with local physicians. There are 15 current students enrolled, with eight of these student nurse-midwives projected to complete the program in May, 1997.

From the inception of the educational program, a number of area physicians have participated in the didactic education of the nurse-midwifery students.

History of Collaboration Among Nurse-midwives and Physicians

In 1971, the first formal document between these professional groups was approved in a joint statement on maternity care.[4] In this document, the common goal of these professionals to improve and expand services was noted. This included the need to cooperate as members of the health care team to provide essential, quality, comprehensive services for women.[5]

This statement was revised in 1975 and superseded in 1982 by the Joint Statement of Practice Relationships between Obstetrician/Gynecologists and Certified Nurse-Midwives.

Since then, the practices of physicians and CNMs have taken many forms. The basis of the collaborative relationship is that CNMs provide services to essentially healthy women in consultation with physicians for complications that arise in the course of providing women's health services. In the care of normal women in labor, the CNM can independently manage the labor and delivery with little or no contact with the physician unless it becomes necessary, based on their predetermined practice guidelines. The case of a woman who develops mild pre-eclampsia late in pregnancy offers an opportunity to examine an example of CNM/MD co-management. The CNM identifies the symptoms of pre-eclampsia and consults with the physician regarding a plan of management. The plan is developed jointly between the CNM and physician. In most cases, the CNM will continue to manage the patient throughout induction of labor and birth offering the necessary surveillance, management and supportive care. Unlike the management of a low-risk laboring woman, the CNM will keep frequent close contact with the consulting MD regarding the patient's status, progress and condition.

In Wisconsin, CNMs work with physicians as consultants who have training in obstetrics. Glasser et al. noted that the oldest continuous practice of CNMs in the state is located at Gundersen Clinic in La Crosse. Beginning with only a few isolated practices in La Crosse, Milwaukee, and Neenah, there are now nearly 20 collaborative practices among physicians and CNMs, ranging from Ashland to Eau Claire, Sparta, Madison, Monroe, Beaver Dam, Oshkosh and West Bend. There are eight collaborative practices in the Milwaukee area.

These additional services can be attributed to the commitment of physicians to work with other professionals who expand and enhance services. No one profession can meet all the needs of all women and families. By working collaboratively, professionals can attend to more health concerns of women and their families. "Strong nurse-midwifery programs are beneficial to physicians as well, freeing them for more specialized care."[1]

Types of Practices

Statewide, there are a number of models of CNM/MD collaboration. In several practices, the CNMs consult with family practice physicians. This offers the opportunity to practice with physicians who focus on primary care to the woman's entire family. Several nurse-midwifery practices consult with physicians who have medical school faculty affiliations. In this type of practice, CNMs co-manage more "at risk women" because of the closer relationship with physicians who manage pregnancy complications in academic settings with tertiary care facilities.

There are also CNMs in Wisconsin who develop contractual relationships with physicians to serve as consultants for various aspects of their practices. For example, one CNM has one physician consultant for patients from a clinical-based practice that give birth at a particular institution and another physician consultant for private patients who deliver at another institution. Each of these arrangements serves separate purposes for the professionals involved in meeting patient needs.

Medical school affiliations offer opportunities for CNMs to participate in the education of obstetric and family practice residents, as well as medical students. This early introduction to nurse-midwifery care and practice in a positive collaborative environment may encourage the physician to seek out such a practice after graduation.

Record of Nurse-Midwifery Care

There have been numerous studies of the outcomes of care provided by CNMs. In an early demonstration project in California,[6,7] CNMs documented dramatic improvements in neonatal mortality rates from 23.9 to 10.3 per 1,000 live birth (below the national average), with a return to 32.1 per 1.000 live births after the project ended. Similarly, the prematurity went from 11% to 6.6%, with an increase to 9.8% after the conclusion of the

project.

There have also been compilations of similar studies, such as that done by Willis and Fullerton[8] which documented CNMs' positive effects on lowering infant mortality, particularly for women and families at greatest risk for problems due to psychosocial or demographic characteristics. A Robert Wood Johnson Foundation-funded study showed that 70% of the care provided by CNMs nationally is provided to women from vulnerable populations, or those disadvantaged by socioeconomics, age, ethnicity, or place of residence [central city or rural].[9,10]

Similarly, the Office of Technology Assessment (OTA)[11] documented the value of the use of CNMs along with other non-physician providers. In that study, as in others, the ability of CNMs to provide access for underserved populations has been well documented. In fact, the OTA study attributed these abilities to communication skills that are emphasized in nursing education. Such well-documented positive outcomes of CNM care have resulted in the encouragement of the increased use of CNMs by the Institute of Medicine.[12,13]

Comparisons to Physician Care

Many studies of nurse-midwifery care have compared CNM and physician care.[11,14] Nurse-midwifery care has been evaluated as equivalent to physician care. These studies noted the particular strength of nurse-midwives' care as communication abilities.

More recent studies have demonstrated that CNMs adhere to American College of Obstetricians and Gynecologists (ACOG) Standards. These provide the basic guidelines that are recommended for quality prenatal care as determined by consensus group evaluations of the available literature.

For example, Baldwin et al.[15] abstracted prenatal records of 2,357 low-risk patients who began care with a total of 249 randomly selected providers that included obstetricians, family practice physicians, and CNMs in Washington state. Charts were reviewed for adherence to the ACOG standards for prenatal care. Overall, the authors concluded that there was a high level of adherence to the ACOG guidelines, with CNMs adhering to a greater degree than physicians. The authors speculated that this could be due to the close

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collaboration achieved through the formal consultative relationships between CNMs and physicians.

Oakley et al.[16] compared pregnancy outcomes for 710 patients of private obstetricians and 471 CNM patients in the Midwest that were all sufficiently low-risk to be considered appropriate for CNM care. The researchers had sufficient statistical power for the study design. They used multivariate statistics to minimize the effects of numerous confounding variables. They found that there were significant differences in number of complications (0.7% versus 0.4%), third or fourth degree lacerations (23% versus 7%), patient satisfaction [4.36 versus 4.23 on a 5 point scale], and infant remaining with the mother throughout the hospital stay (15 versus 27%). In a bivariate comparison, hospital charges for CNM patients were 21% lower than those of physician patients. Therefore, for low risk women, CNM care is a cost-effective option.

CNMs have also been noted to use less technology than physicians when caring for essentially healthy women. In 1992, the Public Citizens Health Research Group surveyed 3,159 hospitals in 41 states to examine cesarean section rates.[17] Even with caseloads of women with equivalent risk, the researchers identified a lower rate of cesarean section among women on CNM caseloads (11%), compared to those cared for completely by MDs (22%). A lower rate of operative deliveries results in cost savings.

Finally, Oakley et al.[18] identified differences in use of technology and psychosocial care between the two professions. These authors attributed the variations to different models of care between the two groups. Based on their education and experience, physicians perform the operative deliveries and handle complications. CNMs are nurses who focus on education and support of normal labor with low technology approaches to the care of healthy women. The researchers also emphasized that there were common elements to the care provided by physicians and CNMs.

Liability Issue

Jenkins[19] identified the idea of vicarious liability to be a myth. Vicarious liability is the legal responsibility of physicians for the actions of another professional, such as a CNM. Jenkins cautioned not to write affiliation agreements that structure for vicarious liability because this adds to the physicians' responsibility. However, Jenkins emphasized that each professional is separately accountable and responsible for their own actions. This means that MDs should not have increased liability when working with CNMs or other advanced practice nurse providers. Jenkins also advised that insurance companies should not be able to place additional surcharges on physician malpractice policies if they choose to work with CNMs.

At a conference held in Washington, DC ["Models of Collaborative Practice: Preparing for Maternity Care in the 21st Century", March 23-25, 1997], Schwarz,[20] the former president of ACOG presented survey findings conducted by the organization that are currently in press. The survey had a 40%-50% response rate. Fellows of ACOG had been asked in 1992 and in 1996 whether they worked in collaboration with CNMs or nurse practitioners (NPs). During those four years, the percent of physician respondents who had collaborative practices had increased from 7.7% to 12.9% for CNMs and from 18.1% to 28.4% for NPs. Schwarz indicated that fewer fellows reported having to pay an insurance surcharge for working with other providers. In their collaborative practices with advanced practice nurses, the numbers who paid such surcharges had fallen from 58%-60% in 1992 to 25%-32% in 1996. He anticipated these numbers would continue to decrease.

Schwarz, reporting on the same survey, stated that the percent of fellows who were involved in cases with a CNM as codefendant was approximately 1%. He viewed this as a small risk, with the benefits of collaborative practices far outweighing the liability risk.

Conclusion

Schwarz noted another important survey that ACOG has also conducted. This survey focused on patient satisfaction. Patient satisfaction data are increasingly being used as outcome measures that are valuable indicators of high quality services to payers.

According to Schwarz, the ACOG survey results indicated that patient satisfaction was higher in collaborative practices with advanced practice nurses than in physician-only practices.

It is equally important to continue viewing CNMs and physicians as vital parts of the health care team needed to provide services to women and their families. It is also necessary for CNMs and physicians to continue participating in the education of the other discipline. Thus, sowing the seeds of collaborative practice relationships can be accomplished early in the education of physicians and CNMs.

In summary, there are significant differences between CNMs and physicians. However, there is also much overlap in their practices. This combination of shared elements of care, as well as unique emphases, promotes collaborative practice tailored to meet patients' needs, resulting in greater satisfaction with care for patients as well as providers.

References

1. Glasser KE, DeLano C, Silva PD. The history and current status of nurse midwifery in Wisconsin. WI Med J,

1992; 91:(2) 67-70.
2. National Center for Health Statistics: Monthly Vital Statistics Report (1993. Sept 9) 42. No. 3(s). (DHHS Publication No. PHS 93-1120). Hyattsville, MD: Author.
3. Wisconsin Department of Health and Social Services, Center for Health Statistics. Wisconsin Maternal and Child Health Statistics 1994. Madison: Author,1995.
4. Varney H. Nurse midwifery. Boston: Blackwell Scientific, 1980:27-28.
5. Varney H. Nurse midwifery. 2nd ed Boston: Blackwell Scientific, 1987:13-14.
6. Levy BS, Wilkinson FS,Marine WM. Reducing neonatal mortality rate with nurse-midwives. *Am J Obstet Gynecol* 1971;109:50-8.
7. Montgomery TA. A case for nurse midwives. *Am J Obstet Gynecol* 1969;105:309-13.
8. Willis WO, Fullerton JT. Prevetion of infant mortality: an agenda for nurse midwifery. *J Nurse Midwifery* 1991;39(2): 98-06.
9. American College of Nurse Midwives. Nurse midwives: quality care for women and newborns. Washington, DC: Author, 1994.
10. Scupholme A, DeJoseph J, Strobino DM, Paine LL. Nurse midwifery care to vulnerable populations. Phase I: demographic characteristics of the national CNM sample. *J Nurse Midwifery* 1992;37(5):341-48.
11. United States Congress, Office of Technology Assessment. Nurse practitioners, physicians' assistants, and certified nurse midwives: a policy analysis. Washington, DC: U.S. Government Printing Office, 1986.
12. Institute of Medicine. Preventing low birthweight: summary. Washington, DC: National Academy Press,1985.
13. Institute of Medicine. Prenatal care: reaching mothers, reaching infants. Washington, DC: National Academy Press,1988.
14. Brown SA, Grimes DE. A meta-analysis of nurse practitioners and nurse-midwives in primary care. *Nurs Research* 1995;44:332-9.
15. Baldwin L, Raine T, Jenkins L D, Hart LG, Rosenblatt R. Do providers adhere to ACOG standards? The case of prenatal care. *Obstet Gynecol* 1994; 84: 549-6.
16. Oakley D, Murray ME, Murtland T, Hayashi R, Andersen HF, Mayes F, Rooks J. Comparisons of outcomes of maternity care by obstetricians and certified nurse midwives. *Obstet Gynecol* 1996;88(5): 823-29.
17. Gabay M, Wolfe SM. Encouraging the use of nurse midwives: a report for policymakers. Washington, DC: Public Citizen's Health Research Group, 1995.
18. Oakley D, Murtland T, Mayes F, Hayashi R, Petersen B A, Rorie C, Andersen F. Processes of care: Comparisons of certified nurse-midwives and obstetricians. *J Nurse Midwifery* 1995;40(5): 399-09.
19. Jenkins SM. The myth of vicarious liability: impact on barriers to nurse-midwifery practice. *J Nurse Midwifery*,1994;39(2):98-106.
20. Schwarz RH. Exploring current research issues. In: Models of Collaborative Practice: Preparing for Maternity Care in the 21st Century: 1997 Mar 23-25; Washington, DC.❖

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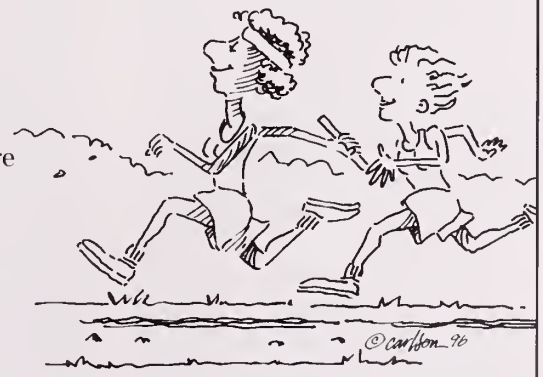

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Testing the Viability of Collaborative Interdisciplinary Practice in Community-focused Primary Health Care: A Case Study in Change

Sally P. Lundeen, PhD, RN, FAAN; Barbara Friedbacher, RN, MSN; Mary Thomas, MSW, Milwaukee; and Thomas Jackson, MD, Madison

Introduction

Although the federal level health care reform debate of several years ago has shifted, there is no doubt that it precipitated an increased awareness of the need to find new and more effective ways to deliver health care in this country. While much of the recent emphasis has been on the implementation of more cost-efficient models of care, it is also clear to many that (a) the traditional models of health service delivery have failed to provide access to essential health services for a large segment of our most vulnerable individuals and families; and (b) many outcomes of care are not acceptable when compared with the cost of providing services. The challenges that both providers and consumers face now and in the coming century require creative and collaborative solutions that transcend our usual ways of doing business. In short, we must find new ways of working together in order to achieve our greatest collective potential.

Need for Demonstration Projects

Multi-disciplinary education and practice may exist in settings where members of several disciplines work independently in the same setting to achieve a variety of goals. Multi-disciplinary activities do not necessarily require significant interaction to define and meet shared goals. In contrast, *interdisciplinary* education and practice require that a variety of disciplines from health and human services with a shared vision and compatible goals work *interdependently* through planning, implementation, and evaluation of strategies to meet those goals on behalf of an identified constituency.

Health care delivered at the UWM SSCNC is accessible to area families as a part of their daily routine rather than as a separate set of services that must be scheduled at the convenience of the providers of care.

Although a significant amount of energy has been spent in the past decade at national, state, and local levels debating the need for interdisciplinary health professionals education and health care delivery models, there are few truly collaborative interdisciplinary programs in place at this time that would fit the latter definition.

Health professionals also need to further define areas of role(s) overlap as well as unique areas of function in order to maximize the allocation of limited health care resources and to best meet the growing health care needs of this nation's communities. Demonstration projects which help to define the mechanisms necessary to move new models of care delivery forward as well as the barriers to change in the current system are critical to the development of new knowledge in this important area of health services research. The University of Wisconsin-Milwaukee (UWM) School of Nursing initiated one such demonstration project a decade ago (in January, 1987) in collaboration with the Silver Spring Neighborhood Center, a multi-service community based agency on the northwest side of Milwaukee. Joined in 1992 by the University of Wisconsin (UW) School of Medicine Milwaukee Clinical Campus and in 1995 by the UWM School of Social Welfare, this collaborative project has taught us much about the advantages and challenges of implementing and maintaining a collaborative primary health care model in an urban community. This article will describe the project and outline lessons learned and continuing challenges.

UWM Silver Spring Community Nursing Center

The UWM Silver Spring Community Nursing Center (UWM SSCNC) has been developed with and is located within a trusted, long established neighborhood center that provides a broad range of services to individuals and families living in the public housing development where the Center is located and the surrounding community. Silver Spring Neighborhood Center (SSNC) services include day care, an alternative

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middle school, recreational programs, tutoring, community advocacy, emergency food pantry, meals for elders, energy assistance, counseling, employment readiness and placement, and community development activities. There is an active Board of Directors and well established connections to community residents and leaders.

The multiple aspects of the nursing center's mission are illustrated by the goals set forth for the UWM Silver Spring Community Nursing Center in 1987 and revised in 1995:

- To deliver independent nursing services to the residents of a high need, under served community.
- To establish a model of comprehensive primary health care delivery that focuses on more than simply medical needs, thereby improving health status outcomes while assuring more efficient and effective utilization of available resources.
- To promote interdisciplinary collaboration with other health care and human services providers to assure more continuity of care and more appropriate use of health and health related resources.
- To develop an interdisciplinary model of health professionals education which will facilitate the preparation of a critical mass of culturally competent, community- focused health care providers.
- To develop a plan of clinical and health care delivery research that facilitates multiple studies in the areas of ambulatory care delivery models, client utilization of services, health status outcomes and cost benefit of nursing and interdisciplinary interventions and the impact of an alternative primary care delivery model.
- To enable UWM SSCNC staff and professionals colleagues, other providers and provider agencies, clients and community residents to develop a collective capacity to work together toward a shared vision of improved health and wellness in the Silver Spring community
- To educate and inform policy makers on issues related to health and health related service delivery.

These goals focus on the development of interdisciplinary personal care services for individuals and families as well as the need to address issues related to the health of the community as a whole. The incorporation of health services into aspects of programming throughout the Silver Spring Neighborhood Center assures that community residents are not forced to choose between seeking early or preventive health services and meeting other needs intrinsic to the challenges of daily survival (i.e. job seeking, food emergency housing, or child care).

Health care delivered at the UWM SSCNC is accessible to area families as a part of their daily routine rather than as a separate set of services that must be scheduled at the convenience of the providers of care. There is considerable emphasis on offering services at times, in places and in ways that are appropriate to the people served. In addition to providing "clinic-based care" to area residents, the program focuses on populations at risk of poor health outcomes such as low income families, adolescent parents, and community dwelling elders.

The UWM CNC Provider Staff

The provider team that has been developed at the Silver Spring Community Nursing Center is a blend of staff members with a variety of educational preparation and expertise.

The UWM School of Nursing team has grown from part-time nurse practitioners in 1987 to a mix of advanced practice and baccalaureate nurses with a range of educational and clinical preparation. The nursing team currently consists of Clinical Nurse Specialists with preparation in community health (2.0 FTE) and mental health (1.0 FTE), Family Nurse Practitioners (2.0 FTE), and community health nurses with case management expertise (1.0 FTE). The interdisciplinary team is completed by a UWM School of Social Welfare Social Worker (1.0 FTE) and a UW School of Medicine primary care physician (.20 FTE).

CNC nurses also coordinate interdisciplinary teams drawn from several Silver Spring Neighborhood programs including day care teachers, recreation workers, teen workers, adult educators, coordinator of programming for elders and alternative middle school staff. It is a collaborative, interdisciplinary effort in the fullest sense of the definition.

Services

Community nursing centers nationally are committed to the integration of health promotion and prevention services into a continuum of health care delivery. The UWM Silver Spring model specifically seeks to aggressively coordinate care and provide the very necessary health promotion, health education and counseling services so limited in many mainstream health care systems. Direct health services include:

- Health assessment for individuals, families, and communities

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- Screening/early detection of health problems and risk factors
- Case management/care coordination of health and human services, including referral and liaison with appropriate other providers
- Psychosocial support for individuals, families and groups
- Health teaching for individuals, families and groups
- Treatment of persons with minor acute conditions
- Surveillance of persons with chronic conditions
- Aggressive community outreach and follow-up

Although the current facility limits the full scope of direct medical services offered at the Center, it should be noted that linkages have been developed to a wide range of primary medical providers with whom the staff works closely through referrals and close communication on shared clients.

In addition to the provision of direct care to individuals, families and groups at the Center, a number of "indirect services" are also provided by center staff. These services may be directed at improving the health of the community as a whole or at specific community groups, education of students or other health professionals, outcome evaluation or health services research or policy related.

The Strengths of a Collaborative Interdisciplinary Model of Primary Health Care

The most significant strengths of this model of health care delivery is the unique perspective and skills that the members of each group of health professionals brings to the process of care.

Although it seems self-evident, providers sometimes do not attend to the complexity of the life experienced by clients which affect both their health status and health seeking behaviors. The interdisciplinary, collaborative model developed through the UWM Silver Spring Community Nursing Center helps assure that comprehensive assessments attend to client *strengths* as well as the physical, psychosocial, and environmental aspects of client needs.

Furthermore, it is imperative that a variety of disciplines be actively involved in the development of intervention strategies for families who are struggling to cope with a complex matrix of issues which effect their health at many different levels. The development of the most creative and effective intervention strategies requires an interdisciplinary team. More holistic assessments and interventions are required if more holistic outcomes are to be achieved by individuals, families and communities.

Medicine

Physician members of the SSCNC team bring an extensive knowledge of differential diagnosis of health problems including the appropriate use of laboratory and other diagnostic procedures. They provide expertise in biomedical interventions focused on the cure or management of acute and chronic illnesses. They are most knowledgeable in the cure and management of illnesses with medical and surgical interventions, including the use of prescription medications.

The physicians on the team provide direct services to clients in the center and also serve as consultants to the nurses in matters pertaining to these areas of diagnosis and treatment. They make and facilitate referrals to medical specialists as appropriate and serve as the point of entry and the primary coordinator of hospital based care for clients.

Social work

The social work perspective focuses on fostering client self-determination, advocating for social justice, recognizing the environmental impact on clients, and providing counseling to individuals and families.

The SSCNC social worker aids in the interpretation of public policies and their impact on clients, facilitates communication between health care team and families, provides reassurance to families and patients, mediate conflicts, and counsels patients and families experiencing emotional distress. The social worker connects clients to a great variety of community resources and coaches clients through the complex process of gaining access to services.

Nursing

The roles of the nursing team in this system are focused on (a) the comprehensive and holistic assessment of both the strengths and the problems of individuals and families and (b) the coordination and assurance of a continuum of accessible, acceptable services which promote improvement in both the short and long term health status of individuals and families in the community.

Although the nurses do provide clinic-based primary care services, much of the work of the nurses occurs in non-clinic settings where community residents participate in other programs related to education, recreation, vocation or family support issues. Health teaching and primary prevention services including screenings are done in classrooms, in the gymnasium, in the day care program, and in homes and other community settings so as to integrate health in the daily routines of as many community residents as possible.

Although the current facility limits the full scope of direct medical services offered at the Center, it should be noted that there is a major commitment to the coordination of ofttimes fragmented service delivery experienced by

Center clients. A recent analysis of nursing interventions at the center indicates that 30% of those services provided by nurses was in the area of case management. The remaining interventions provided by nurses and social workers were categorized as "health teaching, guidance and counseling" (41%); "treatments and procedures (8%); and "surveillance" (21%) (Lundeen, 1997).

Barriers to Collaborative Interdisciplinary Practice in Primary Health Care

The model described here is an exemplar of collaborative interdisciplinary practice, the predominant practice climate for health care delivery in the nation is currently competitive, not collaborative. There seem to be few provider systems that have moved to fully integrate advanced practice nurses, community health nurses, social workers and primary care physicians as truly collaborative team members with unique roles and contributions to make to the improved health of individuals and communities.

Developing and maintaining this collaborative interdisciplinary model at Silver Spring CNC has been a major challenge during the entire decade of the Center's existence. This limitation on the implementation of the most effective collaborative interdisciplinary models of delivery can be attributed primarily to (a) difficulty in shifting the paradigm from a traditional illness care model to a broader health care model; (b) the socialization of the health professions; and (c) the administrative and reimbursement policies in place in this and other states.

Socialization to Professional

The definitions presented earlier in this article which seek to differentiate "primary medical care" from "primary health care" serve as an example of the difficulties that we have had in establishing a shared vision and common goals when we don't always speak the same language. Although there is clearly overlap (which is growing as we continue to work together and learn from one another) and definitive statements or stereotypes are not appropriate some general examples may be illustrative.

For example, the nurse and social worker providers and students at the Center more commonly focus on the strengths and resiliency in center clients when doing assessments and are very comfortable planning and implementing interventions associated with "primary prevention", "care" or "health promotion or maintenance." The physicians and medical students have been more socialized to focus on health problems and deficits and focus on "cure" and "health restoration."

The model described here is an exemplar of collaborative interdisciplinary practice, the predominant practice climate for health care delivery is currently competitive, not collaborative.

In addition, there are varying degrees of expertise and comfort with roles associated with group based intervention strategies and community and aggregate approaches to the accomplishment of shared goals.

Furthermore, we don't document our practice in the same ways across professions and we have had to reassess our various positions on the nature of case management and the appropriate assignment of role of "case manager" in this community based model.

These are but a few of the issues which multi-disciplinary groups committed to interdisciplinary practice must address openly and constantly until role differentiation *and* role overlap is more clearly defined. The practice at the UWM Silver Spring CNC is dynamic and evolutionary. We do not claim to have found the answers, but we believe that we are beginning to define the appropriate questions that must be grappled with now and in the future if health care delivery and health professionals education are to change in ways that will truly meet the health needs of the nation.

Administrative and Reimbursement Policies

The challenges to the viability of models such as the Silver Spring CNC are grounded largely in the current administrative and reimbursement policies which, in turn, reflect the traditional model of health care delivery that is the dominant paradigm in the nation.

In many ways, Wisconsin has led the nation in support for advanced practice nurse reimbursement. Direct reimbursement to masters prepared nurses has been supported by state policy makers. However, there are significant continuing challenges related to reimbursement from Medicaid which effect the practice climate for collaborative efforts across disciplines. In fact, significant reimbursement for many advanced practice nurses and social workers including those at SS CNC remains elusive.

Although some progress has been made in the reimbursement of community-based nursing services by many HMOs, large, state contract managed care networks are still are frequently unwilling to contract with community based non-physician providers for the provision of specific primary care services. The effect of this on many

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community-based practice sites is significant. Even when subcontracts can be negotiated the administrative burden for community-based practices is astronomical.

It is important to note that the current services that non-physician providers can be reimbursed for are based largely on the illness paradigm. That is, for the most part, only those diagnostic and curative services which are reimbursable for physicians in the traditional medical models can be reimbursed for advanced practice nurses.

Complementary services are more likely to be the focus of many community nursing center intervention strategies. As reported earlier, analysis of 1995-96 encounter data from the Silver Spring CNC indicate that less than 10% of all interventions provided by the nurses and social workers in the center were categorized as "treatments and procedures" similar to those which constitute the bulk of primary medical care.

The other services rendered at the center, health teaching, guidance and counseling, case management, and surveillance of chronic issues are consistent with roles which complement traditional medical interventions and strengthen the ability of clients to attain higher levels of health or prevent disease, disability or mitigate disabling circumstances. This entire armamentarium of skills is needed if the increasingly complex health and health related issues of today's' families and communities are to be successfully addressed with cultural competence, compassion and caring.

Although there is considerable research to support the position that primary health care interventions which focus on primary prevention, lifestyle modification, and wellness strategies significantly improve client outcomes (OTA, 1986; Safriet, 1992), there has been limited recognition in the currently approved reimbursement mechanisms of differences in nursing and medical practice. Therefore, those interventions of health teaching, counseling, case management, and surveillance (which may produce the most effective outcomes) are rarely, if ever reimbursed to any significant extent. Primary prevention programs with a population-based orientation which, in some instances, are much more likely to produce cost effective, positive health outcomes for many communities are also not reimbursable under the current structure. This greatly limits the practice climate for a significant percentage of nurse and social work professionals who are educated and practice within a ***health paradigm***.

Conclusions and Recommendations

The needs of families in many communities are changing and primary health care delivery systems must change to meet their needs. Many are faced with specific health care problems, nearly all are faced with problems of limited financial resources, unsafe neighborhoods, and high risk lifestyles. They are also adversely affected by the limited numbers of providers accepting Medicaid clients, difficulty understanding and accessing care through the HMO system, transportation problems, lack of neighborhood health services and lack of culturally competent providers to serve diverse populations. For many community residents, involvement in newly required work activities increases their challenges and barriers.

Under the W2 program, absences from required work and class activities due to illness or health care appointments for adults and children are not easily accommodated. The problem is further exacerbated by the limited number of non-emergency health care services available for Medicaid recipients during evening and weekend hours when they are not involved in required work programs.

The collaborative model which has been developed at SSCNC through the partnership of the neighborhood center, the UWM School of Nursing, UW Madison Medical School and UWM School of Social Welfare provides innovative solutions to the many challenges and barriers low income families face in obtaining primary prevention, health promotion and other primary health care services by expanding the traditional parameters of primary care.

The maintenance of a primary health care center which provides a broad array of services using an interdisciplinary team approach has presented significant administrative and policy barriers and professional challenges which are discussed.

Nonetheless, the potential benefit to health care professionals that may be derived through the intensive attention to role and socialization issues and the benefit to clients as outlined in two exemplars indicate that the UWM SSCNC model and other like it deserve additional development and testing.

Exemplar 1: A difficult day in the life of a low-income family.

Ameshia, a 20-year-old mother of an 18 month old daughter and three year old son, presents at the Childrens' Hospital Emergency Room at 6:15 PM on a cold Wisconsin winter evening, stating that "My daughter started crying at 1:00 AM and has not stopped since." When asked why she brought the child to the Emergency Room instead of seeing the child's pediatrician, she described the following frustrating day.

As an AFDC recipient with Medicaid coverage, Ameshia and her children are assigned to an

HMO. She had called the pediatrician's office at 9:00 AM and was told that although the first open appointment was in two days, the doctor could call her later in the day. Ameshia reported that she had to use a pay phone and asked when she could call the doctor back. The receptionist responded that early afternoon was best, but that there was no guarantee when the doctor would be available. Cold and worried, Ameshia carried her daughter and led her young son the 3° blocks from the pay phone to her sister's apartment, where she was living temporarily. By this time both children were shivering and crying loudly. Her daughter continued to cry throughout the morning.

At 1:00 PM, with no one available to stay with the children, Ameshia bundled them up and again walked to the phone. A voice message at the doctor's office indicated that the office would reopen at 1:30 PM. After returning home the second time, Ameshia gave the children something to eat and was relieved that her daughter fell asleep for an hour.

Ameshia reported that when she awakened at 2:15 PM, she was crying harder than ever and seemed very warm, although there was no thermometer available to check her temperature. Ameshia bundled the children up again and returned to the phone. The rushed receptionist at the doctor's office told her that he was swamped with sick patients and could not come to the phone. She suggested that Ameshia call back later.

Exhausted, worried, frustrated and very cold, Ameshia decided to make the trip across town with her daughter to Childrens' Hospital. She returned to the apartment with her crying children to wait for her sister to come home, hoping she could borrow bus fare and ask her sister to take care of her son while she went to the hospital. It was the end of the month and Ameshia was out of money. To make matters worse, she had missed a WIC appointment earlier in the week because it was five degrees outside, too cold to take two buses to get to Northwest Health Center. She had rescheduled the appointment for today, only to miss it again because of her daughter's illness. At 4:30 PM her sister arrived and gave her bus fare, but stated she had to go somewhere and could not care for Ameshia's son.

Ameshia bundled up her tired and irritable children once again, walked to the bus stop and began the 55 minute trip to Childrens' Hospital, where she was greeted by a waiting room full of parents and sick children. At the registration desk a receptionist could be overheard commenting to a co-worker about her frustration with parents who wait all day with sick children and then show up in the evening at the short-staffed Emergency Room.

Exhausted, worried, frustrated and very cold, Ameshia decided to make the trip across town with her daughter to Childrens' Hospital.

Two hours later Ameshia's daughter was examined by a pediatric resident, who diagnosed the child with otitis media. Ameshia was given prescriptions for the child and instructions about follow-up care. After having the prescriptions filled at the hospital pharmacy, she began the long bus trip home. Because Ameshia had no money to purchase food at the hospital, she fed the children a supper of the few snacks she had quickly placed in her bag before hurrying out of her sister's apartment.

On the trip home Ameshia felt tired and wondered if it was possible that she was pregnant. She had continued a four-year relationship with the father of her two children, but remained the primary caretaker of the children. She worried about another child and whether she and the children would continue to receive health insurance coverage under the Pay for Performance welfare reform program to which she had just been assigned. Perhaps another child would jeopardize her welfare stipend. She knew she should make a doctor's appointment for herself, but that would have to wait until she found someone to answer her questions about her benefits. Both of the children were overdue for well child checkups with the pediatrician. Having moved a year ago to Milwaukee from Racine, the thought of finding a doctor for herself who would take her as a Medicaid client, scheduling of appointments around her Pay for Performance work hours, and traveling by bus with two small children seemed overwhelming, especially after the day she had just spent.

Although she knew prenatal care was important, it was hard to imagine fitting it in soon. All in all, it had been a bad day, an expensive day for the HMO and hospital and a highly unsatisfactory day for the young mother, her children and all involved providers.

Exemplar 2: Another kind of health care system experience. Two months later, Ameshia was directed to Silver Spring Neighborhood Center (SSNC) for her involvement in programs to meet the requirements of Pay for Performance, a welfare reform program.

Although referred to the Center specifically for welfare reform activities, Ameshia soon learned that neighborhood residents were welcome to participate in a wide array of family support programs

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and services. Ameshia was required by the state to spend 30+ hours per week at the Center taking GED classes and working in order to qualify for financial benefits for herself and her children. As a mother who is devoted to her children, she voluntarily participates in on-site parenting classes offered by the Family Resource Center (FRC), which is funded by the Children's Trust Fund of Wisconsin and operated jointly by SS NC and UWM Silver Spring Community Nursing Center (SSCNC). These parenting classes which support welfare families in achieving self-sufficiency provide Ameshia with four-five hours per week credit toward the Pay for Performance requirement, while she increases her parenting knowledge and skills. The FRC also provides free, on-site child care for her two preschool children during all parenting classes and GED classes.

During her orientation to Pay for Performance activities, Ameshia received information about all SSNC on-site services, including the health care and social service programs offered by the interdisciplinary team of the SS CNC. She took advantage of a mini-health fair and cholesterol screening provided by the nurse clinicians, nursing students and a medical student.

One of the parenting classes she attended was facilitated by a Family Nurse Practitioner student who discussed prevention and early recognition of common childhood illnesses and described the things parents can do to promote their child's health. During class break, Ameshia talked with the FNP student about other services available in the SS CNC Clinic and requested an appointment for herself.

Early the next week, during lunch break from her on-site work experience job, she kept her appointment and among other services received a pregnancy test. The positive test confirmed Ameshia's suspicions and she willingly agreed to enrollment in the SS CNC Prenatal Care Coordination Program. Because she had no health care provider in Milwaukee, she was offered the opportunity to receive her prenatal care from the UW Medical School/ St. Luke's Family Practice physician, who is on-site at SS CNC one day per week.

The FNP student and Ameshia scheduled a home visit for their next prenatal care coordination session and established a plan for Ameshia's on-site prenatal and childbirth education sessions.

During her first visit with the physician, Ameshia, the physician and the FNP student set health promotion goals for the pregnancy and agreed to work closely together to promote health for mother and baby. The FNP student and Ameshia scheduled a home visit for their next prenatal care coordination session and established a plan for Ameshia's on-site prenatal and childbirth education sessions.

Subsequent visits with Ameshia enabled the FNP student to review the health care needs of her children and encourage her to follow through with well child exams with the children's pediatrician. With Ameshia's consent, she telephoned the pediatrician and established a plan for collaborating to meet the children's health care needs. The FNP also agreed to provide the children with their overdue immunizations.

During one visit at SS CNC, Ameshia was reintroduced by the FNP to the Center social worker who had first met her when she facilitated a Stress Management Workshop for the GED class. The two women struck up a brief conversation, giving the social worker an opportunity to further build a relationship with Ameshia. After other brief contacts with the social worker at the Center, Ameshia made an appointment to discuss her concerns about welfare reform and her family's financial survival.

Undoubtedly the challenges for Ameshia and her young family will be ongoing and their needs will change overtime. At the same time, Ameshia will have access to the support of the SS CNC and SSNC interdisciplinary team with interventions that are both health promotion focused and geared toward increasing the family's self sufficiency.

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Notes

Lundeen, SP. (1997). Community nursing centers: Issues for managed care. *Nursing Management*, Vol. 28:3, 35-37.

Safriet, BJ. (1992). Health Care Dollars and Regulatory Sense: The Role of Advanced Practice Nursing. *Yale Journal of Regulation.* (2): 417-488.

United states Congress, Office of Technology Assessment. *Nurse Practitioners, Physicians Assistants and Certified Nurse Midwives: A policy analysis.* Washington, D.C. U.S. Printing Office, 1986.❖

Nurse-Midwifery at Gundersen Clinic: A Twenty Year Review

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Abstract
The twenty-year experience of the Certified Nurse-Midwife (CNM) Service at Gundersen Lutheran Medical Center is presented. The Service was started in September, 1975. From 1975 through 1995, the nurse-midwives have attended 9,120 women in labor (32.5% of all laboring women at Lutheran Hospital). During this time, the CNM service perinatal mortality rate was 6.8 per 1,000 births and the primary cesarean section rate was 5.8%. A close working relationship between nurse-midwives and obstetricians is thought to be one of the main factors in the growth, acceptance and safety of the service.

Introduction
Certified nurse-midwife (CNM) attended births in the US have steadily increased since 1975, the first year the National Center for Health Statistics began keeping statistics. In 1975, nurse-midwives attended 19,686 births and in 1994, CNMs attended approximately 200,000 births, a 30% increase since 1991. The percentage of all in-hospital births attended by CNMs was 5.2% in 1993.[1]

Several studies reported in the 1960s through early 1980s documented the safety of nurse-midwifery care.[2-6] Continued favorable reports are present in the contemporary literature. Declercq reviewed information collected from the US Standard Certificate of live births and found that CNM patients delivered in hospitals (95% of their patients) had an incidence of low birth weight of 3.5% compared to the national average of 7%, despite greater than average risk. CNM hospital patients nationally were significantly younger, less educated and more likely to be single and non-white.[7] A study reported in *The Journal of Nurse-Midwifery* demonstrated a lower cesarean section rate, less intervention and as favorable infant and maternal outcomes when patients received nurse-midwifery care as compared with care from physicians.[8] A study published in 1994 looked at various obstetric care providers and their adherence to American College of Obstetricians and Gynecologists practice guidelines. Nurse-midwifery care was found to follow more closely the guidelines than physician care.[9] High level of prenatal education focusing on health promotion, preventative care and reduction of risk have been documented with CNM care.[10] Patient satisfaction with maternity care was found to be enhanced when care was provided by CNMs[11] and nurse-midwives can make a contribution to an obstetric team. These contributions include high patient satisfaction, reduction in in-patient care, lower payroll costs and an appropriate compliment to obstetrician directed care.[12]

Despite high patient and practitioner acceptance, midwifery care, as an alternative to physician care, remains controversial. Every obstetrical service requires continued assessment of quality indicators. The following report evaluates the success of our program to provide pregnancy care to a large group of healthy women over a period of twenty years.

Methods
The following study was conducted at Gundersen Clinic and Lutheran Hospital, La Crosse, Wisconsin. A retrospective review of obstetrical outcomes and pregnancy parameters was conducted. A list of patients receiving midwifery care was generated using delivery logs and the hospital data processing system. All charts were reviewed and antenatal and delivery statistics were abstracted. For

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purposes of evaluating trends, the 20-year interval was broken into four 5-year intervals. Statistical analysis was conducted using Chi square analysis.

Results

During the 20-year interval since 1976, the Gundersen Lutheran Nurse-Midwife Service has attended 9,120 women or 32.5% of all the laboring women at Lutheran Hospital-La Crosse (Table I). The percentage of all deliveries has increased over the interval of the study (Table II) with over 40% of deliveries at our hospital now being delivered by nurse-midwives.

Operative obstetrical procedures were reviewed. The primary cesarean section rate for the nurse-midwifery service patients is 5.8%, significantly less than the rate of 9.4% for the physician service patients ($Chi^2 = 105.26$, $p<.001$) (Table II). Failure to progress, malpresentation and fetal distress were the leading indicators for cesarean delivery for the nurse-midwife service patients and the physician-managed patients. The use of forceps in the nurse-midwife service patients has declined from the high of 104 in 1976-1980 to 27 in 1991-1995. The use of vacuum to facilitate delivery rose from 1 in 1981-1985 to 39 in 1991-1995. Vaginal birth after cesarean (VBAC) rates have increased for both the nurse-midwifery and physician services.

In these 20 years, the nurse-midwifery perinatal mortality rate was 6.8 per 1,000 births. Fifty-nine women served by the service experienced stillbirth or neonatal death. Fetal anomalies (25%), prematurity (60%), and stillbirth/neonatal death (15%) have been the noted causes for the mortalities. The interval 1976-1980 included the highest rate (Table I).

Discussion

This study demonstrates the long-term success of a nurse-midwifery program in providing care to a large number of healthy women. Trends are noted in our review. The nurse-midwifery service has delivered an increasing percentage of the patients receiving care at our hospital. The cesarean section rate has remained low despite this trend. Patients who had medium/high risk status, such as multiple gestation or incompetent cervix have been referred to physician care for delivery since 1980. Our explanation for the lower perinatal mortality rates during the last three intervals includes consideration of the use of routine ultrasound, offered since 1982 at Gundersen Lutheran. Congenital anomalies have been better identified and those patients have been referred to physician staff for care. VBAC success rates could not be identified to know if patients receiving nurse-midwifery care had a higher success rate.

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Table 1. Obstetrical interventions and delivery rates.

Years	Total LH-L Deliveries	Total CNM Del.	Total MD Forceps Del.	Total CNM Forceps Del.	Total MD Vacuum Del.	Total CNM Vac. Del.	Total MD V-BAC Del.	Total CNM V-BAC Del.
1976-1980	5,657	1,139	623	104	4	0	0	0
1981-1985	7,050	2,173	275	28	2	1	44	5
1986-1990	7,561	2,685	220	46	24	7	238	60
1991-1995	7,720	3,123	135	27	59	39	209	66
Total	27,958	9,120						

Table 2. CNM Deliveries, Primary Cesarean Sections (c/s), and Perinatal Mortality

		Primary Cesarean Deliveries		Perinatal Mortality Rates	
Years	CNM Deliveries	Physician	CNM	MD (per 1000)	CNM (per 1000)
1976-1980	20.1%	9.0%	9.9%	13	19
1981-1985	30.8%	9.1%	4.7%	17	8
1986-1990	35.5%	8.6%	5.9%	15	5
1991-1995	40.5%	10.8%	5.9%	17	4
Total	32.5%	9.4%	5.8%*		6.8

*statistically significant ($p<.001$)

Nurse-Midwife and Obstetrician Written Agreement 1995

Nurse-midwifery is the independent management of essentially normal newborns and women, antepartally, intrapartally, postpartally and gynecologically, occurring within a health care system which provides for medical consultation, collaborative management or referral and is in accord with the *Standards of Nurse-Midwifery* (American College of Nurse-Midwives, 1987).

1. Healthy women have the option of selecting CNM care at Gundersen Clinic.

2. Nurse-midwives provide care to essentially healthy women, prenatally, intrapartally, and gynecologically. This care will meet the standards recommended by the American College of Nurse Midwives. When caring for essentially healthy women the CNM is responsible for her own actions.

3. Nurse-midwives are responsible for nurse-midwife patients only, with the care given by mutual consent between the patients and the midwives. Working with patients who have not been followed by the nurse-midwives will be at the discretion of the individual nurse-midwife.

4. Nurse-midwife patients will have an antenatal visit or review with a department obstetrician. A patient referred by an outside physician or CNM and managed by the midwifery service will also have her chart reviewed or be seen by a department obstetrician.

5. The nurse-midwife will inform the obstetrician on call of normal admissions if she/he is not in the house. The nurse-midwife will keep the obstetrician on call informed of any deviations from normal during the course of labor.

6. The obstetrician on call will make every effort to be in the facility during delivery.

7. There are times when the essentially healthy women cared for by nurse-midwives develop complications. In these circumstances, the CNM is required to consult with a physician. Following consultation, care will either be continued by the CNM, co-managed with the physician, or transferred completely to the physician. Indications for consultation are listed in the nurse-midwifery protocols. The CNM is responsible for documenting all physician consultations, co-management decisions.

8. Obstetricians will notify the midwife of CNM patients' hospitalizations or transfers of care. This includes patients admitted to the hospital for antepartal/postpartal complications, such as spontaneous abortions, postpartum endometritis, etc.

9. The nurse-midwife may obtain a second opinion on obstetrical management from an obstetrician who has not previously seen or reviewed the patient antepartally, and can arrange for back-up with an obstetrician other than the on-call obstetrician.

10. Nurse-midwives and obstetricians agree to arrange deliveries within the hospital setting only. The practice, as agreed upon, will be conducted at the Gundersen Lutheran Medical Center, La Crosse, Wisconsin.

11. An annual review of the written agreement and the Nurse-Midwifery service will be completed on a calendar year basis.

The undersigned doctors of the Gundersen Clinic Department of OB/GYN agree to provide consultation and referral services for the CNMs within the department in accordance with this agreement. The undersigned Nurse-Midwives and Obstetricians agree to practice in accordance with this agreement.

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The acceptance of the nurse-midwife care has been based on several factors. Initially, the acceptance, support and active participation by the physician members of the Department of OB-GYN and clinic administration led to the establishment of the CNM Service. The physicians recognized that an associate, prepared to provide quality obstetrical care for a low-risk population, could be included in the Department and become a contributing member of the health care team. Sharing of patients helped establish the program; information about the program was broadcast by the physicians, midwives, nurses, clinic personnel and clinic administration.

The quality of the program was aided by the establishment of clear policies and protocols and by delineation of the CNM Service's consultative routes for medium- and high-risk medical or obstetrical patients. The ongoing review of the nurse-midwife patients during the antepartum physician visit and during the patient's hospital admission helped verify the continued low-risk health status and the continued nurse-midwife involvement. In those instances when obstetrical and medical emergencies occurred, there was ready transfer of care to the physician staff, with nurse-midwife agreement. A commitment to ongoing education (in-house and regional/national education conferences) and to peer review of all departmental patients contributed to quality improvement of the department.

The nurse-midwives' interest in birthing rooms, alternative labor/delivery requests, parenting/pediatric concerns have attracted many patients to the service. With the support of the research, facility and department members, the nurse-midwives have been able to promote these issues, without sacrificing safety.

Utilization of the CNM services has been chosen by those women who prefer female attendants and by those who focus on the low-risk nature of CNM care. This has freed the physician staff to attend those who prefer physician care and those who are medium or high risk. If CNM service patients evolve into medium or high risk, the physician staff remain confident that the midwives will request their involvement, knowledge and expertise.

Conclusion

The Gundersen Lutheran CNM Service has grown significantly since its beginning 20 years ago with improving outcome for patients. We have observed an increasing patient population, a decreasing perinatal mortality rate and a low cesarean section rate. The service reflects the national trend of nurse-midwifery growth since 1975. The CNM service is now over 20 years old and has begun delivering a second generation of nurse-midwifery babies.

References

1. *Quickening*. Nov/Dec 1996;27(6);1.
2. Breckinridge M. A frontier nursing service. *Am J Obstet Gynecol* 1928;15:867-72.
3. Gatewood TS, Steward JB. Obstetrics and nurse-midwives: the team approach to private practice. *Am J Obstet Gynecol* 1975;123:35-40.
4. Hellman L, O'Brien F. Nurse-midwifery- an experiment in maternity care. *Obstet Gynecol* 1964;24:343-9.
5. Montgomery T. A case for nurse-midwives: a rural California hospital test feasibility of using nurse obstetric assistants in its maternity-newborn program. *Am J Obstet Gynecol* 1969;105(3):309-13.
6. Nielsen I. A midwife-physician team in private practice. *Am J Nurs* 1975;75:1693-5.
7. Declercq ER. Where babies are born and who attends their births: findings from the revised 1989 United States Standard Certificate of Live Births. *Obstet Gynecol* 1993;81:997-1004.
8. Davis LG, Riedmann GL, Sapiro M, Minogue JP, Kazer RR. Cesarean section rates in low-risk private patients managed by certified nurse-midwives and obstetricians. *J Nurse-Midwifery* 1994;39(2): 91-7.
9. Balwin LM, Raine T, Jenkings LD, Hart LG, Rosenblatt R. Do providers adhere to ACOG standards? The case of prenatal care. *Obstet Gynecol* 1994;84(4):549-56.
10. Oakley D, Murtland T, Mayes F, Hayashi R, Petersen B, Rorie C, Andersen F. Process of care compariesons of certified nurse-midwives and obstetricians. *J Nurse-Midwifery* 1995;40(5):399-409.
11. Turnbull D, Homes A, Shields N, Cheyne H, Twaddle S, Gilmour WH, et al. Randomized, controlled trial of efficacy of midwife-managed care. *Lancet* 1996;348:213-218.
12. Bell KE, Mills JI. Certified nurse-midwive effectiveness in the health maintenance organization obstetric team. *Obstet Gynecol* 1989;74(1):112-6.❖

Medical Coverage Analysis for Wisconsin's Olympics: The Badger State Games

Joseph J. Greene, MS, ATC, and David Bernhardt, MD, Madison

Abstract
The objective of this analysis is to determine the prevalence and severity of injuries encountered during the 1994-96 Badger State Summer Games Finals. Allocation of available medical personnel can be determined with this information. Medical contact with an athlete required an evaluation form to be completed by the health care professional covering the event. Information was compiled and analyzed to determine injury frequency and severity. Of the 31,580 athletes competing over the three year period in the 11 sports provided with medical personnel, 285 suffered a reportable injury. Soccer and basketball had the highest number of reported injuries with 68 and 65 injuries respectively. Basketball (2.00%), cycling (1.59%), wrestling (1.50%) and roller hockey (1.24%) had the highest injury rates. Severity of injury determined by the number of injuries transported to a medical facility found wrestling (23), soccer (22), basketball (11), and cycling (6) with the highest numbers of severe injuries. Wrestling (1.27%), basketball (.34%), soccer (.32%), and cycling (.21%) had the highest rate of severe injury. The most common sustained injuries were found to be sprains, strains, skin wounds, and contusions. These four types of injuries made up 70.18% of the injuries sustained. In conclusion, non-physician medical presence may be adequate coverage in most venues at multi-sport athletic competitions like the Badger State Games because of the relatively low frequency of severe injuries.

Greene is a clinical athletic trainer at the University of Wisconsin Hospital Sports Medicine Center. He is also the athletic trainer at James Madison Memorial High School and coordinates the medical coverage for the Badger State Games. Bernhardt is an assistant professor, Department of Pediatrics and a Primary Care Sports Medicine physician for the University of Wisconsin Hospital Sports Medicine Center. He is a team physician for the University of Wisconsin Athletic Department and serves as the medical director for the Badger State Games.

Introduction
The Badger State Summer Games are one of the largest "Olympic-style" amateur athletic events of its kind in the US today. Over 25,000 athletes annually compete at both the regional and state final level of competition in 22 different sports. In the Badger State Summer Games Finals held throughout the Madison, WI area, there were 12,192 competitors in 1994, 13,455 in 1995, and 11,424 in 1996.[1] The wide variety of sports and venues represents a unique challenge to the medical personnel covering the competition. The purpose of this study was to determine the prevalence and severity of injuries sustained in the different sport competitions. This information could then be used to determine the type and distribution of the approximately 100 available medical personnel covering this large event.

Methods
Data was collected over the course of the 1994-1996 Badger State Summer Games Finals held annually during the last weekend of June. Possible volunteers were solicited in April of each year by mail. Those who volunteered were assigned sports and venues based on their preferences and on the perceived inherent risk involved with participation in the given sports. The competition takes place over four days with nearly all sports competing at multiple venues. Full day competition is scheduled for the weekend days. Depending on need and preference, some volunteers worked full day shifts while others worked shifts six to eight hours long.

All medical volunteers were supplied with injury report forms. The forms were filled out by medical personnel whenever a medical contact concerning a reportable injury was made. A reportable injury was defined as 1) An injury which disqualified or limited an athlete from competition, 2) An injury for which transportation to a medical facility was necessary, or 3) An injury which allowed the athlete to continue competition, but first aid care, treatment, or external support was given. A severe injury was defined as any injury that required transportation to a medical facility. The reports were filed at the medical headquarters following the completion of competition.

Data collected was analyzed to determine injury prevalence and severity by sport. The sports of basketball, soccer, cycling (mountain bike, road race and criterium), gymnastics, roller hockey, 10k run, softball, swimming, track and field, volleyball, and wrestling were provided with medical coverage.

Results
A total of 38,071 participants took part in the Badger State Summer Games Finals throughout the three

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Table I: Injury rates for Badger State Games sports.

Sport	94 Injuries	95 Injuries	96 Injuries	Total Injuries	% Of Total Injuries	Number Of Competitors	Injury Rate For Sport
Basketball	46	12	7	65	22.81%	3252	2.00%
Cycling	9	23	14	46	16.14%	2902	1.54%
Wrestling	5	8	14	27	9.46%	1804	1.50%
Roller Hockey	0	6	2	8	2.81%	645	1.24%
Soccer	24	28	16	68	23.86%	6722	1.01%
Track and Field	8	5	5	18	6.32%	2873	0.65%
Softball	12	9	9	30	10.53%	5848	0.51%
Volleyball	7	4	5	16	5.61%	4711	0.34%
Swimming	3	3	0	6	2.11%	2182	0.27%
10k Run	0	1	0	1	0.35%	641	0.16%
Total	114	99	72	213	100.0%	31,580	

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years studied. Of this total, 31,580 competed in sports that had medical personnel present. A total 285 of these athletes (.90%) suffered a reportable injury. The sports of soccer and basketball were found to have the largest number of reportable injuries having 68 and 65 injuries respectively. The highest injury rates were found in the sports of basketball (2.00), cycling (1.59%), wrestling (1.50%) and roller hockey (1.24%). Complete results regarding prevalence of injury and injury rate are listed in Table 1.

Minor injuries such as sprains, strains, skin wounds, and contusions accounted for the majority of the injuries. These four injuries alone make up 70. 18% of the injuries suffered. (See Table 2) Miscellaneous injuries were those not classified and were not reported more than once.

As Table 3 indicates, a very high percentage of the reported injuries were minor in nature and did not require transportation. A total of 57 athletes, which makes up 20.0% of those injured and .18% of the total number of athletes competing, suffered injuries that required transportation to the nearest medical facility for further medical attention. Only 15 of the 57 (5.3%) needing hospital evaluation required transportation via ambulance.

The severe injuries that required transportation to a medical facility took place most commonly in the sports of wrestling (1.27%), basketball (.34%), soccer (.32%), cycling (.21%). (Table 3)

In addition to these findings, it is valuable to know the type and numbers of medical personnel that were volunteers for medical coverage during the 1994-1996 Badger State Summer Games Finals. These results are indicated in Table 4.

Discussion

During the 1994-96 Badger State Summer Games Finals, the overall injury rate to athletes was found to be only .90%. It is important to note that this applies only to the sports that were provided with medical personnel. This rate of reported injuries may be lower than the actual injury rate because many of the smaller injuries may have gone unreported by athletes even though they suffered a reportable injury according to our classification system. Another factor affecting this injury rate is that the size of certain venues precludes the medical personnel from evaluating all of the injuries that occur. Despite the likelihood of the underreporting of injuries, the finding of a .90% injury rate is similar to the results found during a study of the 1994 Star of the North Summer Games in Minnesota where an injury rate of .88% was reported.[2]

Additionally, our results indicate that a very high percentage of injuries were minor in nature and required only on-site evaluation and first aid care. This was the case for 80% of the injuries reported. Medical attention was most often required for sprains, strains, contusions and skin wounds. These findings are very similar to the findings of Pelletier[1] and Martin,[3] as both found sprains and contusions to be the most common types of injury. In addition, Laskowski and his colleagues reported that 65.0% of the total injuries were contusions, sprains, and strains.[2] Our study finds the same injuries make up 53.7% of the injuries suffered.

Since only 5.3% of the total number of injuries required ambulance transport and 20.0% required transportation overall, medical care provided by trained acute-care physicians, athletic trainers, emergency medical technicians, para-

Table 2. Types of injuries sustained.

Type of Injury	Injuries Suffered	Percent of Total Injuries
Sprains	63	22.11%
Contusions	55	19.30%
Skin Wounds	47	16.49%
Strains	35	12.28%
Heat Exhaustion	30	10.53%
Fractures	13	4.56%
Concussion	5	1.75%
Tendinitis	3	1.05%
Miscellaneous	34	11.93%
Total	285	100.0%

Table 3: Injuries requiring transportation.

Sport	Transported To Hospital	Transported Via Ambulance	Percent Of Total Competing In Sport
Wrestling	15	8	1.27%
Basketball	11	0	0.34%
Soccer	18	4	0.32%
Cycling	6	0	0.21%
Track and Field	2	2	0.14%
Swimming	2	0	0.09%
Softball	2	1	0.05%
Volleyball	1	0	0.02%
Totals	57	15	

Table 4. Medical Personnel

Type of Medical Personnel	1994	1995	1996	Total
Athletic Trainer (including PT/ATC)	46	39	34	119
EMT/Paramedic	22	24	16	62
Student Athletic Trainer	20	17	16	53
Physician	9	8	5	22
Chiropractor	10	6	6	22
Nurse	4	6	9	19
Physical Therapist	1	2	0	3
Total Volunteers	112	102	86	300

medics, chiropractors, nurses, and physical therapists is appropriate and adequate at nearly all venues. This medical care seems even more appropriate when considering that the rates for severe injury are most likely inflated since the smaller injuries not requiring transportation are the injuries most likely not reported.

The highest risk sports for severe injury in the Badger State Games are wrestling, basketball, soccer, and cycling due to their relatively high severe injury rates. The sport of wrestling is an even larger concern when it is considered that 8 of the 15 ambulance transports were provided for injured wrestlers. Our findings also demonstrate that the high numbers of competitors in the sports of basketball and soccer lead to a higher number of injuries in those sports. A high number of competitors was a factor affecting the number of injuries suffered in these sports in at least two other studies as well.[2,3] It seems reasonable to keep these venues well staffed with a non-physician medical presence due to the high numbers of injuries reported.

Conclusion

Following retrospective analysis of the reported injuries over a three year period, it is apparent that continuation of voluntary medical care is essential to multi-sport athletic events such as the Badger State Games. The sheer number of competitors alone indicates the high possibility for athletic related injury. The presence of medical personnel at the various venues may also be a factor in decreasing the number of medical transports to emergency rooms because many of the injuries suffered are minor in nature. Due to the relatively high severe injury rates in the sports of wrestling, basketball, soccer, and cycling, it is recommended that

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access to a physician be made at these venues when possible. It seems reasonable to have appropriately trained non-physician medical personnel be the primary coverage at the remaining sports due to the very low severe injury rates associated with participation in those sports.

This study was performed in order to collect information and provide ourselves and other medical personnel involved with similar competitions a means to allocate available medical staff in the most efficient manner. Data will continue to be collected in future Badger State Games competitions to allow adjustment to any trends in prevalence and severity of injury associated with participation in the various sports.

In exchange for their time and effort, volunteers are provided with a free golf outing, free lodging if necessary, a gift of appreciation, and a reception held on the final evening of the competition. It is the hope of the Badger State Games that we continue to have the excellent support we have received in the past from medical personnel throughout the state of Wisconsin during the twelve years the Badger State Games have been in existence.

References

1. Foy R. On the road to the future: Badger State Games rolls into second decade. 1995 Badger State Summer Games Program. 1995:31-32.
2. Laskowski ER, Najarian MM, Smith AM, Stuart MJ, Friend, LJ. Medical coverage for multievent sports competition: A comprehensive analysis of injuries in the 1994 Star Of The North Summer Games. Mayo Clin Proc 1995;70:549-555.
3. Martin RK, Yesalis CE, Foster D, Albright JP. Sports injuries at the 1985 Junior Olympics: An epidemiologic analysis. *Am J Sports Med* 1987;15:603-608.
4. Pelletier RL, Montelpare WJ, Stark RM. Intercollegiate ice hockey injuries: A case for uniform definitions and reports. *Am J Sports Med* 1993;21:78-81.❖

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Pasteurella Multocida Osteomyelitis by a "Cat Lick"

Robert M. Gullberg, MD, FACP; H. Leslie Ericson, MD; Terri Rearick, RN; and Sally Petrowski, RN, Racine

Introduction

Osteomyelitis from Pasteurella multocida has been occasionally documented,[1-4] but virtually all cases have resulted by either direct inoculation of the organism by puncture wound from the bite of a cat or a dog, or rarely by hematogenous spread.[5-8]

We report a very unusual case of a man who developed acute and chronic Pasteurella multocida osteomyelitis of his left and right great toes without trauma.

Case

The patient, a 37 year old male with a history of morbid obesity, venous insufficiency and stasis dermatitis of his legs, presented with an 18 month history of painful, draining ulcers from the planter aspects of his big toes and paronychiae without cellulitis. Plain x-ray film showed osteolytic bone on the medial aspect of the shaft of the distal phalanx of the right great toe. Similar changes were seen on the left great toe. A bone scan was similarly consistent with osteomyelitis. The patient's white blood cell count was 6900 without a left shift. His initial Westergren sedimentation rate was 28 (normal 0-25). His electrolyte panel was normal and he was afebrile. At the time of surgery, infected bone was removed for culture and the ulcers were saucerized. Cultures of both toe phalanges and a bone biopsy grew Pasteurella multocida and Staph epidermidis. Histopathological changes on the bone biopsy were consistent with acute and chronic osteomyelitis. The patient denied having sustained any cat or dog bite or puncture wounds on his feet. However, he admitted to having a cat that regularly licked the bottom of the bathroom tub, his toes and his feet after he was done bathing and also while the patient was towel drying. The patient was treated with four weeks of IV trimethoprim sulfamethoxazole and the infection was cured.

Dr Gullberg, Dr Ericson, Ms Rearick and Ms Petrowski are associated with All Saints Medical Group in Racine, WI. Reprint requests to: Robert M. Gullberg, MD, FACP, Dept. of Infectious Diseases, All Saints Medical Center, 3807 Spring Street, Racine, Wisconsin 53405.

Discussion

Pasteurellae are nonspore forming, nonmotile, bipolar staining gram negative coccobacilli which are aerobic and facultative anerobic. They grow on many ordinary media and most human infections are caused by P. multocida, P. haemolytica, P. pneumotropical and P. ureae. Pasteurella multocida has a worldwide distribution and can be recovered from the nasopharynx or GI tract of many domestic and wild mammals and birds. It can cause sporadic and epidemic pneumonia and sepsis in cattle, sheep and fowl and cholera in chickens.[12]

Skeletal infections caused by Pasteurella multocida usually occur in patients who have been exposed to cats and dogs and are associated with bites, particularly by cats.[7] Pasteurella carrier rates in saliva of up to 50% for dogs and 67% for cats have been reported. However, only 5% of dog bites become infected compared with 20-50% of cat bites.[1,9] Cat bites tend to inflict deep puncture wounds, whereas dog bites tend to be a tearing type of an injury. This allows a complete evaluation of the wound and free drainage.[1] The patient was predisposed by his long-standing skin breakdown from hammer toeing of the big toes and skin breakdown from chronic friction. In our case, the infection was chronic for many months. The incubation period for Pasteurella multocida infections is usually short with the onset of symptoms within a few days,[3,4,10] but asymptomatic latent periods of several months and even years have been described.[10] The organism generally has a low virulence.[5] This patient was afebrile and nonseptic with a minimally elevated sed rate.

For treatment of osteomyelitis caused by Pasteurella multocida, a combination of adequate surgery with debridement of devitalized tissue and proper antibiotic therapy is recommended.[5,6,8,10] The drug of choice appears to be penicillin or Augmentin,[4-9] but in our patient there was a possible copathogen with the Staph epidermidis organism. Thus, we felt that according to sensitivities, adequate doses of IV trimethoprim sulfamethoxazole was the mcst appropriate treatment. Our patient responded nicely to this regimen.

Conclusion

Our case of osteomyelitis is the first case that has been reported caused by nontraumatic means. Direct inoculation of Pasteurella multocida into a host by licking or by a contaminated water source with resultant disease has not been reported until now.

References

1. Desai SS, Groves RJ. Subacute Pasteurella osteomyelitis of the hand following dbg bite. *Orthopedics* 1990; 13:653-656.
2. Branson D, Bunkfeldt F. Pasteurella multoci & in animal bites of

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humans. *Am J Clin Pathol.* 1967;48:552-555.
3. Lucas GL, Bartlett DH. Pasteurella multocida infection in the hand. *Plast Reconstr Surg.* 1981; 67:49-53.
4. Holms W, Ali MA. Acute osteomyelitis of index finger caused by dog bite. *J Hand Surg.* 1987; 12B:137-139.
5. Johnson RH, Rumans LW. Unusual infections caused by Pasteurella multocida. *JAMA* 1977; 237:146-147.
6. Norrman B., Nilehn B., Rajs, J., Karlberg, B. A fatal human case of Pasteurella multocida septicaemia after cat bite. *Scand J Infect Dis* 1971; 3:251-254.
7. Ewing R, Fainstein V, Musher DM, Lidaky M, Claridge J. Articular and skeletal infections caused by Pasteurella multocida. *South Med Journal* 1980; 73:1349-1352.
8. Tan CC, Ti TY, Lee EJ. Pasteurella multocida osteomyeliltis of the cervical spine in a patient on chronic haemodialysis. *Singapore Medical Journal* Aug. 1990; (JC:uri) 31(4):400-402.
9. Goldstein, Ellie. Bite wounds and Infection. *Clinical Infectious Diseases*, 1992; 14:633-640.
10. Bell DB, Marks MI, Eickhoff TC. Pasteurella multocida arthritis and osteomyelitis. *JAMA* 1969; 210:343-345.
11. Bjorkholm B, Eilard T. Pasteurella multocida osteomyelitis caused by cat bite. *Journal of Infection* 1983; 6:175-177.
12. Mandell, Principles and Practices of Infectious Disease. 3rd Edition, 1990; 206:1746. ❖

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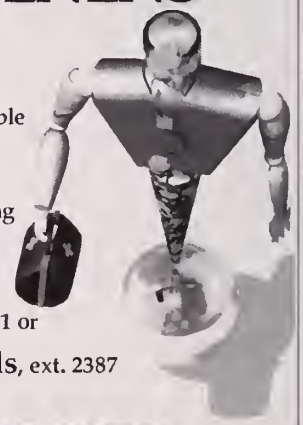

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Book Review
Accidental Falls: Their Causes and Injuries
by Alvin S. Hyde, PhD, MD

Jane Mahoney, MD, Madison

Accidental Falls: Their Causes and Injuries is a well-written and comprehensive book that is of interest to both health professionals and lay readers. The chief strength of this book is that it heightens awareness of the enormity of accidental falls as a public health problem. In addition, it is quite broad in its treatment of a subject that, by nature, crosses many disciplines. In particular, for readers from a biomedical background, it provides cogent and easy-to-understand information on kinesiology and industrial design as they relate to falls. Another strength is the author's humorous and approachable writing style. He is an excellent writer who allows the reader to easily understand the important points.

The chief weakness of this book is that, in some respects, it is quite simplistic, particularly in regard to medical factors and medications that increase fall risk. In addition, some information is outdated. The author quite rightly points out that there are existing controversies in the epidemiology of falls and pathogenesis of fractures; however, he at times runs counter to mainstream thinking in the field, and I think this may reflect his lack of more recent literature. Despite these shortcomings, the book does accurately convey key points. Comments on specific chapters follow.

In Chapter 2, the falls categorization (slip, trip, stumble, tumble, and crumple) is very helpful; however he tends to downplay the complex interaction of environmental and biomedical factors, particularly in regards to "slipping" falls. While an environmental hazard is typically present in a slipping fall, biomedical factors, such as decreased vision and impaired cognition, are often important as well. Such biomedical factors may increase the risk of a slipping fall when an environmental hazard is encountered. Also overly simplistic is the described relationship between type of fall and type of injury. Specifically, he asserts that head injuries may be more common in crumpling falls (versus trips); however there is no data to support this. Finally, the author asserts that up to 1/4 of hip fractures occur without falls. Certainly there are anecdotal reports of hip fractures preceding falls; however, the preponderance of evidence suggests that nearly all hip fractures result from falls, and do not happen spontaneously.

In Chapter 5, the author looks at medical conditions in relation to types of fall. Again there is much oversimplification. For instance, he states that peripheral neuropathy is associated with stumbles and tumbles. However, peripheral neuropathy may also be associated with slipping-type falls due to impaired foot placement and slowed reaction time. In addition, the author states that peripheral neuropathy causes more severe impairment than does central nervous system dysfunction. This is unlikely to be true. Proprioceptive loss can be compensated to a large extent by vestibular and visual input. Central nervous system dysfunction, when it impairs pathways of sensory processing and motor control, may have profound effects on balance that are not easily compensated.

In the discussion of CNS processes and their relation to falls, there are several points of misinformation. First, the author draws the conclusion that dementia is not an important cause of falls. Dementia impairs judgment and reaction time, and cognitive impairment has been associated with a five-fold increase in falls risk. Also incorrect is the attribution of CNS conditions to "crumpling" type falls. Falls related to CNS diseases may be slips, trips and stumbles, as well.

Further, the author characterizes falls seen in "drop attacks," Parkinson's and Normal Pressure Hydrocephalus as caused by collapse of anti-gravity muscles. There are several problems with this characterization. Firstly, drop attacks are much disputed as a distinct entity. Many falls that were previously characterized as "drop attacks" may, in fact, be due to diseases associated with impaired postural control (CVA, Parkinson's, medical illness). Secondly, although Parkinson's and Normal Pressure Hydrocephalus do cause drop-type falls, these are due to abnormal postural reflexes rather than to sudden loss of muscle strength.

At the end of the chapter on medical conditions, the author discusses the role of vertebro-basilar insufficiency in causing "drop attacks." Vetebro-basilar insufficiency is a rare cause of falls. It should be associated with loss of consciousness, vertigo or other brainstem symptoms.

Chapter 6 discusses the impor-

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tance of medications. The author places emphasis on drug half-life, and states that short half-life drugs are not associated with falls. The importance of half-life has been well studied only in relation to benzodiazepine class. A recent article suggests that even short half-life benzodiazepines may increase falls risk, in a dose-related fashion.

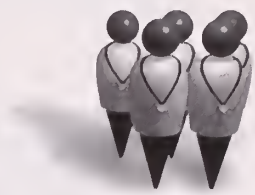
Also somewhat misleading, the author ignores other important differences in drug class and side-effect profiles. For instance, among antidepressants, tricyclic, but not SSRI agents have been associated with falls. Among tricyclics, those with high anticholinergic and sedating properties (first generation) are considered higher risk than agents such as desiprame and nortriptyline, which have lower side-effect profiles. Antipsychotic drugs also have been associated with increased hip fractures, and this appears to be independent of side-effect profile. That is, both high-potency (low anticholinergic) and low-potency (high-anticholinergic) agents have been implicated.

Finally, in regard to medications, there is little evidence to suggest that cardiac medications and antihypertensives increase falls in the absence of orthostatic symptoms.

Chapter 9 discusses determinants of type of injury. Critical points are covered, but somewhat neglected is the issue of hip padding. Thin older adults (who lack protective hip padding) are at greater risk for hip fracture when a fall occurs.

Finally, regarding fall prevention (Chapter 10), a recent study has shown that a multifactorial intervention decreases falls in frail elderly. In addition, several studies have shown that combined exercise/risk-behavior modification programs decrease falls in healthier community-dwelling elderly.

Despite these limitations, overall, the book is comprehensive and easy-to-read, and gives clinicians and other health care providers a fund of knowledge that should help their care of the elderly at risk for falls.❖



MetaStar Matters

MetaStar's Quality Improvement Activities: An Overview

Joseph N. Blustein, MD; Steven R. Laking; and Dennis Spurlin, Madison

One way to assure positive health care outcomes is by a strong program of medical review. When appropriate information is abstracted and analyzed, purchasers, providers, and consumers can be confident the care they are receiving is of value.

A series of articles previously published in this column has detailed specific Medicare quality improvement projects that MetaStar has undertaken. Those reports have presented quality indicators, benchmarks, and statistical analyses of improvement. This article provides an overview of other areas in which MetaStar is working to improve care. Major portions of the organization's activities involve medical review services for both the public and private sectors.

Who We Are, What We Do

MetaStar, formerly the Wisconsin Peer Review Organization (WIPRO), is a private, non-profit, physician-sponsored organization that contracts with the Health Care Financing Administration (HCFA) to oversee quality of care in the Medicare program in Wisconsin. The organization was founded in 1974 to monitor the quality and appropriateness of health care for Wisconsin Medicare beneficiaries. MetaStar has expanded over the years to include contracts with various state agencies and private providers to monitor and assess health care through medical review.

MetaStar's mission is to effect positive change in the quality, efficiency and effectiveness of health care. The organization stresses the ongoing assurance of health care quality for a wide variety of public and private clients, working in close association with groups at every level — local, state and federal government, physicians, hospitals, clinics, educational institutions, and consumers.

MetaStar's staff includes physicians, statisticians, epidemiologists, registered nurses, data analysts, medical records professionals, information services technicians, and other specialized support staff.

This combination of informed professionals makes possible an objective view of health care from both a quality evaluation and data analysis point of view. At the heart of MetaStar's services is experience in the collection, analysis and intelligent presentation of a wide array of health care statistical data. MetaStar uses this "accuracy by the numbers" as the basis for its services.

MetaStar's Board of Trustees maintains a physician majority. The physician membership of MetaStar elects Peer Review Panel members. This ensures maximum input from the physician community in clinical issues examined by the organization. A diverse advisory board allows MetaStar to benefit from the expertise of individuals in the medical, business, research and consumer interest fields.

In 1993, under HCFA's direction, there was a shift from sample-based record review to cooperative projects. While much diminished, MetaStar's Medicare medical review continues. Under the HCFA contract MetaStar reviews Hospital-Issues Notices of Noncoverage (HINNs), provider-requested upward diagnosis-related group (DRG) adjustments, and beneficiary complaints. The goals of this

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MetaStar Matters is not reviewed by the *WMJ* Editorial Board. Joseph Blustein is Medical Director; Steven Laking is Senior Vice President and Chief Operating Officer; and Dennis Spurlin is Communications Specialist. All are associated with MetaStar. Reprint request to Jay A. Gold, MD, JD, MPH, MetaStar, 2909 Landmark Place, Madison, WI 53713.

Continued from previous page

review are to assure high quality care for Medicare beneficiaries, ensure appropriate utilization of hospital care and to validate accuracy in coding diagnoses and claims procedures.

WIPRO conducts a variety of programs under contract with various state governmental bodies. All State of Wisconsin contracts remain under the WIPRO name.

Looking Forward

MetaStar is establishing partnerships with health purchasers, insurance companies and other organizations. The company's independence enhances its position in the private sector, by providing clients with impartial data analyses. MetaStar is actively pursuing partnerships with nursing homes, HMO's, and private clinics.

Health purchasers, who partner with MetaStar do so in order to improve the quality of care provided to their employees and families, while maintaining or reducing costs. Providing purchasers with information on costs, effectiveness, options and alternatives has tremendous potential. Health care service providers can utilize the same types of data, information and processes to help improve their quality of care; and to help reduce their cost of providing care to make them more competitive in the market place — especially the managed care arena.

Other expertise offered by MetaStar includes independent medical case review, quality improvement projects for private providers, diagnosis and procedure coding to help improve billing accuracy, consulting and data and information analysis. Such activities are carefully circumscribed so as not to conflict with MetaStar's role as a Medicare and Medicaid contractor.

To learn more about how MetaStar can help your individual practice or your hospital, clinic or independent organization, please contact Steven R. Laking, MetaStar's Senior Vice President and Chief Operating Officer at: (608) 274-1940, (800) 362-2320, E-mail at: slaking@wipro.sdps.org, or fax 608-274-5008. ❖

Scope of Practice and Medical Delegation

Kalisa Barratt, SMS Assistant General Counsel

It is commonplace for physicians to work with non-physician clinicians, often in an employer-employee relationship. Indeed, physicians may now set up medical corporations with some other health care providers. The following is intended to help physicians by specifically defining the responsibility for supervising nurse practitioners and physician assistants. Although not all non-physician clinicians are subject to regulation, the following information is generally applicable to other unlicensed personnel acting under the physician's direction or employment.

License to Practice Medicine

State law clearly prevents the unlicensed practice of medicine and surgery. The practice of medicine and surgery is defined in statute to mean: "To examine into the fact, condition or cause of human health or disease, or to treat, operate, prescribe or advise for the same, by any means or instrumentality... [and] [to] penetrate, pierce or sever the tissues of a human being."

The prohibition against practicing medicine without a license does not apply to any person providing patient services as directed, supervised, and inspected by a physician who has the power to direct, decide and oversee the implementation of the patient services rendered. Thus, a person performing a medical act that has been delegated to him or her by a physician with proper oversight, is not practicing medicine without a license.

Supervision Requirements in Delegated Medical Acts

Nursing

There has been confusion over what level of physician supervision is necessary under state licensing law and regulation for nurses because they may perform nursing acts without physician supervision. The following excerpt from the Board of Nursing's Code governs delegated medical acts:

"... PERFORMANCE OF DELEGATED MEDICAL ACTS. In the performance of delegated medical acts an RN shall:

(a) Accept only those delegated medical acts for which there are protocols or written or verbal orders;

(b) Accept only those delegated medical acts for which the RN is competent to perform based on his or her nursing education, training or experience;

(c) Consult with a physician, dentist or podiatrist in cases where the RN knows or should know a delegated medical act may harm a patient; and,

(d) Perform delegated medical acts under the general supervision or direction of a physician, dentist or podiatrist."

"General Supervision" is defined at Wis. Adm. Code sec. N 6.02(7) as meaning "regularly to coordinate, direct and inspect the practice of another." Thus, nurse practitioners must be under the direction and inspection of a physician when performing delegated medical acts. However, under this definition there is no requirement that the supervising physician be physically present during the delegated act. Clear written protocols and physician review are essential for a nurse to accept a delegated medical act. A violation of the standards of practice would constitute unprofessional conduct on the part of the nurse.

Kalisa Barratt, JD

Advanced Practice Nurses

Under the new advanced practice nurse prescribing law, advanced practice nurse prescribers may issue certain prescription orders appropriate to their area of competence, as established by education, training or experience. Physician collaboration, however, is still required. The rule specifies that advanced practice nurse prescribers are to collaborate with other health care professionals, at least one of whom shall be a physician. Collaboration is defined as a process which involves two or more health care professionals working together, in each other's presence when necessary, each contributing one's respective area of expertise to provide more comprehensive care than one alone can offer. Advanced practice nurses who prescribe independently must main-

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tain malpractice insurance coverage. This coverage is different than what is required of physicians. Beyond extending prescribing privileges to advanced practice nurses who meet criteria for a prescribing certificate, the law does not change any other current licensure limitations of registered nurses or advanced practice nurses. For delegated medical acts, the above rules still apply.

Physician Assistants

Unlike nurse practitioners, physician assistants (PAs) do not have an area of independent professional practice. The scope of the PA's practice is specifically created to be under the supervision of a physician. Each physician may supervise no more than two PAs.

A PA's scope of practice is defined in Wis. Adm. Code sec. Med 8.07: **Med 8.07 Practice.** (1) SCOPE AND LIMITATIONS. In providing patient services, the entire practice of any physician assistant shall be under the supervision of a licensed physician. The scope of practice is limited to providing patient services specified in sub. (2) A physician assistant's practice may not exceed his or her educational training or experience and may not exceed the scope of practice of the supervising physician. A task assigned by the supervising physician to the physician assistant may not be delegated by the physician assistant to another person.

(2) PATIENT SERVICES. Patient services a physician assistant may provide include:

(a) Attending initially a patient of any age in any setting to obtain a personal medical history, perform an appropriate physical examination, and record and present pertinent data concerning the patient in a manner meaningful to the supervising physician.

(b) Performing, assisting in performing, routine diagnostic studies as appropriate for a specific practice setting.

(c) Performing routine therapeutic procedures, including injections, immunizations, and the suturing and care of wounds.

(d) Instructing and counseling a patient on physical and mental health, including diet, disease, treatment and normal growth and development.

(e) Assisting the supervising physician in a hospital or facility...by assisting in surgery, making patient rounds, recording patient progress notes, compiling and recording detailed narrative case summaries and accurately writing or executing standing orders or other specific orders following consultation with and at the direction of the supervising physician.

(f) Assisting in the delivery of services to a patient by reviewing and monitoring treatment and therapy plans.

(g) Performing independently evaluative and treatment procedures necessary to provide an appropriate response to life-threatening emergency situations.

(h) Facilitating referral of patients to other appropriate community health-care facilities, agencies and resources.

(i) Preparing written prescription orders for drugs if specifically directed to do so by the supervising physician and in accordance with procedures specified in s. Med 8.08(2).

Med 8.08(2) dictates that PA prescribing may only be done under a specific written protocol between the PA and his or her supervising physician, under the mutual agreement that the PA is qualified and experienced to do so, with direct consultation with the supervising physician when practicable, and with prescription orders prepared to include the name, address and telephone number of both the supervising physician and the PA. The rule also requires that the supervising physician review and countersign the prescription order:

1. at the time the prescription order is prepared;

2. within one day of the patient record prepared by the PA in the physician's office or hospital at which the supervising physician has privileges; or

3. review by telephone or other means as soon is practicable but within 48 hours, with the supervising physician countersigning within one week the record prepared by the physician assistant if he or she practices in an office facility other than the supervising physician's main office of a facility or hospital in which the supervising physician has staff privileges.

Physician Liability

Physicians should be aware of the additional liability associated with practice arrangements with both dependent (i.e., employed by the physician) and independently functioning non-physician clinicians. The legal doctrine of "respondeat superior" makes individuals liable for the improper conduct of their agents, even though the individual did no harm. Therefore, where non-physician clinicians are performing delegated medical acts, the supervising physician assumes responsibility and therefore liability for the non-physician clinician's actions (unless the non-physician clinician was acting outside the scope of his or her duties).

If employed by the physician, the physician's medical liability carrier will provide ancillary coverage for the non-physician clinician in addition to the physician's liability coverage. If the non-physician clinician is in independent practice, there may be some question about whether the physician will be vicariously liable for acts of the non-physician clinician. Finally,

hospital regulations may require non-physician clinicians seeking hospital privileges to demonstrate liability insurance coverage limits higher than offered to that professional group on the insurance market. As a result of these and other liability considerations, a physician should consult with his or her medical liability carrier to determine whether his or her professional coverage is adequate.

Proper Delegation/Risk Management

It is essential that the physician is confident that the person to whom the act has been delegated has the necessary skills, education and training to carry out the task and conform to the standard of care and can document such. This may be done by:

- Verifying licensure status
- Conducting a thorough past employment history review
- Writing clear protocols for each act
- Ensuring the act is within the individual's scope of practice
- Entering into delegation agreements
- Being physically present the first few times the act is performed
- Documenting proper performance
- Engaging in ongoing oversight and periodic monitoring

Conclusion

Physicians may be ultimately responsible for medical acts delegated to non-physician clinicians. Proper delegation requires time and care. Ultimately, the decision whether or not to delegate a medical act will depend on the individuals and the act involved. For more information, please contact **Kalisa Barratt at the SMS (800) 362-9080, ext. 233, or via e-mail at: KALISAB@smswi.org.**

Much of this information is based on chapters of *A Physician's Guide to Wisconsin Health Law.*❖

It's Time to Buy That Computer

Doug Turecek, chief information officer

You've probably been considering it for some time, but maybe when you walk into your local computer or electronics store to buy a personal computer you get overwhelmed by the barrage of options and questions from the salesperson.

Sometimes it's just easier to walk out of the store and console yourself by saying you're not sure you really need a personal computer. The truth is, you're not alone. The myriad of choices and the rapid pace of change makes it difficult, if not impossible, to feel comfortable with purchase decisions.

The bottom line, however, is that the reasons to buy a personal computer far outweigh the stress of the purchase process. Personal computers are no longer just toys for the closet techie, they offer an enormous potential for simplifying your life personally and professionally.

Computers have been used in physicians' offices for years for business purposes, mostly to keep track of billing and to write letters to patients. But today, the computer is an excellent tool for retrieving a wealth of medical information.

Imagine sitting in the comfort of your family room or den and accessing your office computer system to view patient records or review tomorrow's schedule. You could also connect to the Internet to exchange electronic mail with colleagues around the world, search the National Library of Medicine databases to augment a research article you're developing, or more importantly, connect with the SMS's WISMED Web page to stay current on topics that affect your profession. (Please see two related articles that appeared in the *WMJ* last year: *Connecting to the Internet* from September, 1996, and *Making WISMED Your Gateway to Internet Health Care Resources*, from October, 1996.)

On a personal level, we each need time to step away from the stress of the average work day and recharge our batteries. The computer can be a great tool for enhancing this process. Within seconds, you can move walls on the floor plan of your new cabin at the lake, search a CD-ROM for a recipe to satisfy your craving for Thai peanut sauce, or spend quality time with your seven year-old as she explains how to use Reader Rabbit.

You could also connect to the Internet to e-mail a college roommate you've been thinking about lately, update your investment portfolio as you plan for that magical retirement date, shop for a new car, explore potential vacation sites, or just mindlessly surf for whatever catches your eye.

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How Will You Use It?

The key to feeling satisfied with your computer purchase is to understand how you plan on using it and how much you're willing to spend. With these two issues in mind, the bewildering choices can be reduced to a more manageable number.

For example, if you plan on using one computer for both the home and office or you would like to use it when you travel, then a laptop computer would be a better choice than a desktop system. Although laptops have the processing power of a desktop computer, you'll end up paying an additional $1,000-2,000 for the size, weight and portability of a laptop.

Budgeting for a computer purchase can be difficult primarily because you're trying to buy what you want for now, plus attempting to account for your needs in the next year or two. In general, you can plan on spending $1,500-2,500 for a mid-range desktop computer and $2,000-4,000 for a mid-range laptop computer. Obviously, the more features or raw horsepower you desire will have a proportional impact on the purchase price.

With the incredible rate of evolution for computers, it's nearly impossible to anticipate much beyond a year or two from now. By that time, your needs will change, the minimum requirements for the software you want to purchase will change or the latest-greatest techno-toy will be incompatible with your system.

In addition, if you're not already comfortable with computers, throw in an extra $100-150 dollars for a good class at the local community college or computer store. If you're spending several thousand dollars for a system, why not increase the chances that you're getting the most out of the investment by knowing how to use it?

The following breakdown of the options in a computer purchase can be used as a guide when you're ready to make your purchase. These recommendations are based on a sensible mid-range computer running Microsoft Windows for an average user. In almost all cases, the more you can reasonably afford, the better.

Brand Names: For most users, it's better to spend the extra money and go with the highest-rated computer makers like Compaq, Hewlett-Packard, IBM, or Dell. Typically, the extra you pay is for a better warranty, more locally-available support options and better integrated components. If you're fairly technical and are comfortable investigating problems within your PC on your own, then you can save some money by looking at the clone market.

Processor: Typically, you'll want an Intel Pentium processor running at a minimum of 133 MHz or 166 MHz. As with most options discussed here, the bigger, the better, as long as it fits within your budget. If you intend on running new multimedia software, then you'll also want to make sure the processor is an MMX model.

Memory: Also known as Random Access Memory (RAM), this is the working area for any applications that are running at the moment. The absolute minimum is 16 megabytes (MB), but 32 megabytes is even better. An adequate amount of memory is even more important

Editor's Note:

An article in the May, 1997 issue of *The Alberta Doctors' Digest*, by J. Barrie McCombs, MD, Director, Medical Information Service, at the University of Calgary, Alberta, Canada, discusses some basic concerns physicians may have regarding the purchase of a personal computer.

In "A Colleague Assesses the Value of a Computer," Dr McCombs addresses the very real issue of finding time to learn how to use a computer. But as the author points out, the time commitment required to learn the basics of personal computing has dropped sharply. Dr McCombs suggests that you take advantage of the many introductory, hands-on computer courses offered through local colleges, computer retailers, and community programs.

Doctor McCombs presents another "excuse" you might be using to avoid making the big purchase: typing. If your typing skills are not as sharp as your surgical skills and you still use the two-fingered hunt and peck method, you shouldn't feel that you are automatically disqualified from being able to use a computer.

"Some individuals do very well with just two fingers," writes Dr McCombs. He points out that typing tutor software is available that makes it simple and fast to learn.

And, with the use of a "mouse," typing is largely reserved for word processing. A mouse is a pointing device that lets you select choices on the screen by pointing at them and clicking a button to activate that option. "No more typing of obscure commands like in the early days!" Dr McCombs gleefully points out.

Finally, Doctor McCombs has the answer to the question, "What kind of computer should I buy?" He says, "The ones that your friends and colleagues use! Then you can get help and exchange information easily."

than the processor speed. A fast processor, with minimum memory, will be slower than a lesser processor and extra memory.

Hard Disk: This is the long-term storage area for your documents, data files, and the actual programs. The current trend in software is to load as many multimedia objects into a program as possible, but these videos, sounds and images require exponentially more disk space. A hard-disk of two gigabytes (GB) or more is a good minimum.

Video: There are two primary issues when it comes to video. You should have at least two megabytes of video memory, or VRAM, and even more if you are a big game player. The other issue is the monitor. A 17-inch screen is easier on your eyes if you can afford it, but good display sharpness is probably more important than physical size. Make sure that the dot-pitch is rated at .28 mm or less. This measurement is one of the few where a smaller number is better.

CD-ROM: Most software now comes on CD-ROM and all new drives can play your audio CDs. The high-capacity, optical drives are rated in relation to the original CD-ROM drives. So a 4X drive is four times faster than the original drives, and so on. A drive rated at 8X is fine, but 12X and 16X drives are also available. Today, most CD-ROMs can't be read at a speed faster than 8X, but if you can afford a little extra for the 16X drives, you'll be prepared for the future.

Fax/Data Modem: If you plan on using your PC as a fax machine or plan on spending time on the Internet, this is definitely not a place to save money. Make sure the speed of the modem is at least 33.6 kilobits per second (kbps). For a little extra, you can now get 56 kbps modems, but you'll want to check with your Internet access provider for compatibility.

Other Options: Items like TV-tuner cards, built-in speakers, telephone answering functions, and so on can add to your computing experience, but their true value is dependent on your own needs. Computers still can't beat the quality of your home audio system or your home entertainment center, but for the price, they may be worth a try.

So before you even walk into the store, think about your needs and expectations for a computer and even consider making some notes. Make sure that you communicate these issues with the salesperson and don't assume that any question is 'dumb.' If you don't feel comfortable with the salesperson's answers or the way you are being treated, go somewhere else. There is plenty of competition for your business.

Buying a computer is not all that different than buying a car; you may not know exactly how a combustion engine works, but you know what you want it to do. If you know what you want the computer to do, you're well on your way to being a satisfied computer owner.

Note: The *WMJ* has reprints available of a recent article on purchasing a PC that ran in the *Wall Street Journal* entitled, "All the Basics You'll Need to Know When Buying a PC." For free copies, contact production assistant Michelle Koehler at (800) 362-9080, by fax at (608) 283-5401, or e-mail your request to: MICHELKO@smswi.org.❖

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Financial Fitness
Paying for College: Last-Minute Funds

Michael Dolan, CLU, ChFC, Madison

If you've put off saving for college, and you suddenly find yourself with a high school junior on your hands, you've got some catching up to do. But don't despair. There are ways to (1) raise last-minute cash and (2) cut college costs. Here's a rundown:

Sources of Cash

A home equity loan, if you've lived in your home for some years, may provide the most ready cash. Most home equity loans are structured as revolving credit -- perfect for college bills because you can write checks as tuition bills come due and pay interest only on the amount actually in use.

Under the 1986 Tax Reform Act, interest due on home equity loans is fully tax-deductible only if the amount borrowed does not exceed the original cost of the home plus improvements *or* if excess amounts (up to current fair market value) are used for tuition or medical bills.

A life insurance loan, especially if you own an older policy with considerable accrued cash value, is another possibility. A policy loan does not have to be repaid. But it's important to remember two things: Any outstanding loan will be deducted from the death benefit, and tax deductions for interest on such loans is being phased out under the consumer interest rules of the 1986 Tax Act.

A broker loan, if you own securities, is still another option. Interest rates are generally lower than interest rates on personal loans. But the interest is only partially deductible, subject to the phaseout on consumer interest deductions, and you will have to be prepared to put up additional money or sell your securities if their price should drop.

Cutting College Costs

There are a number of ways to reduce the cost of college, among them:

- Attending college in your home state where tuition may be lower and special grants and loans may be available to residents.
- Using high school programs, such as Advanced Placement courses and exams, to attain sophomore standing.
- Enrolling in cooperative education programs that combine work and study.
- Studying for two years at a local community college, then moving on to a four-year residential college.

Michael Dolan, CLU, ChFC

- Taking advantage of honors programs and merit awards at schools that may be less well known and therefore less costly.
- Enlisting in ROTC and exchanging a free college education for a commitment to military service.
- Going to work for an employer who offers tuition reimbursement, and attending college in the evening.
- Where there's a will, there's a way. Determined high school graduates will find a way to attend, and pay for, college.❖

Dolan is president and chief operating officer of SMS Insurance Services and a member of the National Associaiton of Life Underwriters. He can be reached at SMS ext. 550, or via e-mail at: MIKED@smswi.org.

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Continued from previous page

Mary J Tiegs
Richard H Ulmer, MD
Kenneth M Viste, Jr, MD
Margaret Wiersum

In Memoriam
In loving memory of those individuals who will grace our paths forever.

Roger Bender, MD
Helen C Christian
Paul Hodges, Sr
Henry Houston
Bernard Leiterman
John and Josephine Mehr
Charles Nolan
Jean Mary Reuter
John P Reynolds
Ruth Schober
John Kim Scott, MD
Darlene Statz
James Wright

The individuals named below made contributions to the State Medical Society Foundation through the SMS membership dues statement from January 1997-March,1997.

Corazon P Arellano, MD
Sara Arnold, MD
Gregory J Bachhuber, MD
Curtis C Baltz, MD
James H Barbour, MD
Brian E Black, MD
Ernest L Burnell, MD
Brian P Butler, MD
E Frank Castaldo, MD
Hansa C Choithani, MD
William P Crowley, Jr, MD
Gerald J Derus, MD
Daniel C Ebel, MD
Tobias Enright, MD
Kevin M Fickenscher, MC
Richard J Fitzpatrick, MD
Raymond O Frankow, MD
Bradley G Garber, MD
Michael S. Garrity, MD
George L Gay, Jr, MD
Roger S Gray, MD
Theodore L Hartridge, MD
Larry L Heller, MD
David M Henneghan, MD
Timothy R Hinton, MD
Alfhil I Jensen, MD
Kay E Jewell, MD
Howard H Johnson, MD
David G Kamper, MD
Gerald C Kempthorne, MD
Charles K Kincaid, MD
David H Klehm, MD
Harvey S Kohn, MD
Paul G LaBissoniere, MD
Patrick F Limoni, MD
Robert E Lund, MD
Massoud Maleki, MD
Anthony J Marchlewski, MD
Dominic J Martinetti, MD
Peter J McCanna, MD
Mary L McComis, MD
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Cecilio T Mendoza, MD
Dean D Miller, MD
Julie M Mokhtar, MD
Walter D Moritz, MD
Richard E Neils, MD
Saleh A Obaid, MD
Ewald H Pawsat, MD
Bernard B Poeschel, MD
Anthony E Pogodzinski, MD
Nathaniel G Rasmussen, MD
Deborah M Reisen, MD
Fred B Riegel, MD
Layton F. Rikkers, MD
John R Russell, MD
Garth R Schneider, MD
Walter A Scholten, Jr, MD
Alan I Schwartzstein, MD
Keith G Seifert, MD
John L Sims, MD
Mark K Stevens, MD
Elieser B Suson, MD
Menandro V Tavera, Jr, MD
Joseph E Trader, MD
Allan F Van Nostrand, MD
Indur B Wadhwani, MD
Warren H Williamson, MD ❖

Physician Briefs

Fred Bannister, MD, general practitioner, retired after 32 years at Chetek Medical Clinic (now part of Midelfort Clinic). Doctor Bannister earned his medical degree at the University of Wisconsin, Madison. He remarked recently that Chetek's lack of a hospital posed some challenges over the years, including traveling a great deal in order to see patients in the office and make rounds. Doctor Bannister is going to retire in Chetek and plans to stay involved in community projects.

Tom Faciszewski, MD, an orthopedist, was inducted as a Fellow of the American Academy of Orthopaedic Surgeons. Members have completed medical school training in addition to at least five years of specialty studying orthopedics in an accredited residency program, passed a comprehensive oral and written exam, and been certified by the American Board of Orthopaedic Surgery. Doctor Faciszewski is the medical director of Marshfield Spine, a multidisciplinary group of spine care specialist physicians at Marshfield Clinic.

Joseph Geenen, MD, a gastroenterologist has been appointed to an advisory board for Affiliated Research Centers, Inc. Doctor Geenen is president of Gastroenterology Consultants Ltd, Milwaukee.

Peter Goy, MD, an internist, joined the medical staff of the Falls Medical Group. He will practice in the urgent care facility in Menomonee Falls.

Adolf L. Gundersen, MD, a surgeon, retired from the Gundersen Medical Foundation where he served as Chair, on February 28, 1997. Doctor Gundersen, grandson of the clinic's founder, Adolf Gundersen, MD, earned his medical degree from Harvard College, Harvard Medical School. He completed a surgical residency at Massachusetts General Hospital. Doctor Gundersen was clinic Chief Administrative Officer from 1964 to 1972, clinic President from 1962 to 1976, Foundation President from 1988 to 1992 and Chair from 1992 to 1997. According to Gundersen Lutheran President, Philip J. Dahlberg, MD, many of the clinic's greatest accomplishments are the result of Doctor Gundersen's influence. "Doctor Adolf has much to be proud of, and we have much to thank him for," said Dr Dahlberg.

Jeffrey Kalenak, MD, an ophthalmologist, joined Community Memorial Hospital, Menomonee Falls. Doctor Kalenak will be specializing in glaucoma.

Anthony Rogerson, MD,an otolaryngologist, was recently published in the Journal of Otolaryngology-Head and Neck Surgery. It was funded by a grant from the American Academy of Otolaryngology Foundation to compare the surgical methods used for treatments of benign vocal cords lesions. The goal of Doctor Rogerson's study was to determine which technique produced the best healing and voice recovery. The results, presented at the annual meeting of the American Academy of Otolaryngology, showed that patients in the laser group had much better voices after surgery and healed with less scarring. "While the majority of common voice problems do not require surgery, the CO_2 laser has been shown to have some clear advantages over traditional techniques used for laryngeal surgery," said Dr Rogerson. The laser is also being used by several specialties at the Monroe Clinic for a variety of treatments.

Jill M. Stebbins, MD, a family practitioner joined the medical staff of Gundersen Clinic-Sparta. Doctor Stebbins earned her medical degree from the University of Minnesota, Minneapolis. She completed her internship and family practice residency at the University of Minnesota-St. John's Hospital, St Paul.

Sridhar V. Vasudevan, MD, was elected Alternate Delegate from the Waukesha County Medical Society to the House of Delegates of the State Medical Society of Wisconsin. Doctor Vasudevan serves on the Board of Directors of the Waukesha County Medical Society and on the Government Affairs Commission of the State Medical Society of Wisconsin. He is past president of the Wisconsin Society of Physical Medicine & Rehabilitation, the American Academy of Pain Medicine and the Midwest Pain Society. ❖

Obituaries

Martin, Albert G., MD, 86, a surgeon from Sarasota, Fla, formerly of Milwaukee, died March 9, 1997. Doctor Martin earned his medical degree from Harvard University in 1935. He completed his internship and residency at the Lankenau Hospital, Philadelphia in 1938. He authored 18 publications on various surgical problems of the gall bladder, appendectomy, appendicitis, and colon. Doctor Martin was chief of surgery at the former Lutheran Hospital. He was a founding secretary and later president of the Milwaukee Academy of Surgery and was president of the Wisconsin Surgical Society. He was a member of the American Board of Surgery, American College of Surgeons, past president of the University of Wisconsin Medical Alumni Association, chair of the Wisconsin Credential Committee, American College of Surgeons, a member of the Medical Society of Milwaukee County, the SMS Fifty Year Club, and was a Life Member of the State Medical Society. He is survived by his wife Anna; three children, Albert Martin of Elizabeth, NJ; Robert Martin of Larchmont, NY; and Thomas Martin of Milwaukee, Wis., and two grandchildren.

Tributes to loved ones can help others

The memorial program of the SMS Foundation offers physicians a unique opportunity to provide a living memorial to a loved one or friend through a gift to the Foundation. A memorial contribution can provide financial aid to a needy medical student, help stimulate research on behalf of the public health or aid in the preservation of Wisconsin's medical history. When a memorial gift is made to the Foundation, the deceased person's family receives a special card with the name of the donor. For more information, contact Julie Hein, Executive Director, SMS Foundation at ext. 323 or via e-mail at: JULIEH@ smswi.org.❖

Korbitz, Robert Frederick, MD, 67, a family practitioner from Monona, died May 9, 1997. Doctor Korbitz earned his medical degree from the University of Wisconsin, Madison in 1962. He completed his internship in general practice at St. Luke's Hospital. Doctor Korbitz was an ensign in the US Navy. He entered active duty as a naval officer and served during the Korean War, assigned to both the USS Mt. McKinley and the 3rd Marine Division. In 1963 he became a partner in the Monona Grove Clinic. Doctor Korbitz earned certification by the American Board of Family Practice in 1972 and served as an adjunct professor of medicine with the University of Wisconsin Medical School. In 1977 he retired from family practice. From 1982 until 1991, he worked part-time as a consultant to the Department of Health and Social Services. Doctor Korbitz was a member of the American Medical Association, Dane County Medical Society and the State Medical Society. He is survived by his wife, Irma, two sons: Eric Korbitz of Whitefish Bay; and Adam Korbitz of Madison; four brothers: Fred Korbitz of Albuquerque, NM; Bill Korbitz of Thorton, Colo; Martin Korbitz of Greeley, Colo; and Bernard Korbitz, MD, of Omaha, Neb; and one sister, Debbie Bjerstedt of Circle Pines, Minn.❖

AMA Awards

The Wisconsin Physicians listed below recently earned AMA Physician's Recognition Awards. They have distinguished themselves and their profession by their commitment to continuing education, and the SMS offers them its congratulations. The * indicates members of the SMS.

April 1997

* Bock, Harvey M.
* Canver, Charles C.
Chang, Chen-Kang
Fenske, Scott D.
* Fownes, Douglas R.
* Francisco, Orlando M.
* Gehring, John V.
* Giles, Laurence T.
* Hacker, Philip K.
* Keller, Thomas A.
Larson, Sanford J.
* Mohammad-Zadeh, Ali A.
* Nelsen, Paul D.
Rucker, Joseph W.
* Shannahan, John M.
* Todd, Paul C.
* Webster, Stephen B.
* Wilson, J. Frank
* Yohanan, James M.❖

County Society News

Brown. The Brown County Medical Society approved Robert Tillotson for membership.

Dane. The following were approved for membership in the Dane County Medical Society: Tiffany Rench; Richard Baker, Jr, MD; Elizabeth Bisinov, MD; Victoria Cabanala, MD; Michael Lynch, MD; Bryan Magenheim, MD; Timothy Tanke, MD; Ellen Wermuth, MD; Margaret Wilcosts, MD; Amy R. Morris; Charles Jahn, MD.

Douglas. The following physician was approved for membership in the Douglas County Medical Society: Allen S. Hanson, MD.

LaCrosse. The LaCrosse County Medical Society approved the following physician for membership: Stephen E. Carlisle, MD.

Marathon. The Marathon County Medical Society approved the following physicians for membership: Thomas Andrew Wolfe, MD; Thomas Doering, MD.

Milwaukee. The Medical Society of Milwaukee County has approved membership for the following: Stephen Dennis Coleman, MD; Anil K. Doniparthi, MD; Neville W. Duncan, MD; Janet R. Durham, MD; Sharon Anne Gordon, MD; Jane D. Kivlin, MD; Anita E. Kawecki, MD; Piotr J. Kolanowski, MD; Arlet G. Kurkchubasche, MD; Lance Peter Longo, MD; Lisa Beth Nass, MD; Rajit Saluja, MD; John S. R. Deacon, MD; Mark Kevin Aasen; Khaeaja Shahid H. Baig, MD; Kerry Lynn Drain, MD; Susan Marie Duffek, MD; Noelle Christine Dunn, MD; David Andrew Ferber, MD; Rita Villanueva Guttersen, MD; Peter Holtz, MD; Farhat Nasreen Kokan, MD; Heidi J. Pinkerton, MD; Guglielmo C. Sala, MD; Simon John Warren, MD; Jacquelyn Dawn Wiermaa; Cynthia J. Bryant; Tiera Nell; Timothy Ripple; Jennifer Schroederus; Philip Stoyke; Hendrikus G. Krouwer, MD; Christina Maria Plzak, MD; Ashima Saini, MD; Mark Joseph Schaefer, MD; Sarojini Sharma, MD; Barton Gearhard Siebring, MD; Roy Milton Troutman, MD; Charles C. Van Norman, MD; Charles Jay Waisbren, MD; Greg Peter Watchmaker, MD; Robert Kastelic, MD; Donald J. Nadar, MD; Michael J. Schmalz, MD; James Russell Allen, MD; Amy Evelyn Bourne, MD; Lora Ann Darrisaw, MD; Leigh Ann Griggs, MD; Brian S. Hirano, MD; Nancy W. Lai, MD; Jeffrey J. Stephany, MD; Frederick George Westreich, MD; Shilpi Khosla, MD; Jim Robinson.

Oneida-Vilas. The following physician was approved for membership in the Oneida-Vilas County Medical Society: Bruce K. Jacobson, MD.

Outagamie. The Outagamie County Medical Society approved the following physicians for membership: Allan D. Belden, MD; Constance R. Deline, MD; Kim R. Riess-Sagers, MD.

Portage. The following physician was approved for membership in the Portage County Medical Society: Ronald Thomas Lacascio, MD.

Sauk. The Sauk County Medical Society approved the following physicians for membership: Alison K. Dalrymple, MD; Dale P. Fanney, MD; Tom Sullivan, MD; John Keener, MD.

Richland. The Richland County Medical Society approved the following physicians for membership: David C. Barton, DO; Stephen J. Delventhal, MD; Donald T. Fullerton, MD; Shalini Manchanda, MD; James A. Weeks, MD.

Rock. The following were approved for membership into the Rock County Medical Society: Joan F. Addington-White, MD; Richard M. Auchter, MD; Robert J. Braco, MD; David A. Braunreiter, MD; David M. Brickman, MD; Peggy A. Callahan, MD; Derek S. Greene, MD; Stephen F. Lewis, MD; Paul E. Mannino, MD; Manuel A. Mendoza, MD; Teresa M. Mendoza, MD; Emily G. Robinson, MD; Richard T. Weirich, MD; Barry I. Spiegel.

Waukesha. The Waukesha County Medical Society approved the following physicians for membership: Donald J. Landgraf, DO; Randal Ruvalcaba, MD; Anne Traynor, MD; Dianne E. Wu, MD.

Winnebago. The following physician was approved for membership in the Winnebago County Medical Society: Kathleen R. Price, MD.❖

Classified ads

MANITOWOC, WISCONSIN. The Manitowoc Clinic, a member of the Aurora Health Care system, is seeking a general internist to join our 16-physician multispecialty group. Guaranteed two year salary and excellent benefits package. Contact or send CV to: James Robinson, Administrator, Box 1270, Manitowoc, WI 54221-1270. Telephone (414) 682-8841. 6-8/97

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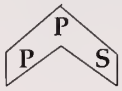

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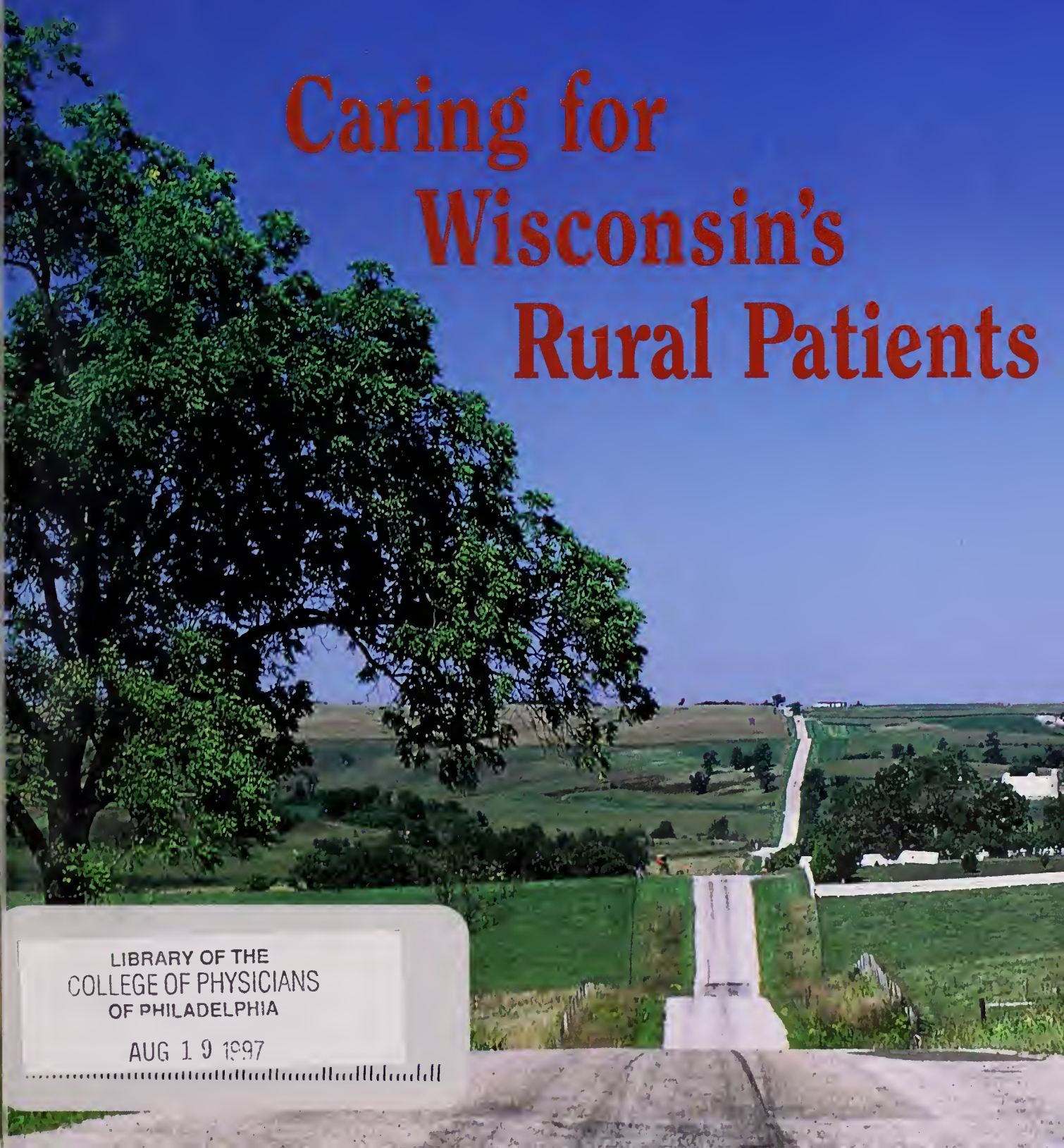
▼ Cancer Screening and Prevention in Rural Wisconsin 32

WMJ
Wisconsin Medical Journal

August 1997

Caring for Wisconsin's Rural Patients



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Created by the Territorial Legislature in 1841 and now representing nearly 8,500 member physicians, the Society's purpose is to "advance the science and art of medicine and the health of the people of Wisconsin; ensure that physicians are equipped to deal effectively with the economic and political aspects of practice; and serve as the patient and physician advocate to government and other relevant publics." The major activities of the Society concern medical education, peer review, legislation, community health education, scientific affairs, socioeconomics, health planning, service to physicians, operation of the Charitable, Educational and Scientific Foundation, and publication of the *Wisconsin Medical Journal*.

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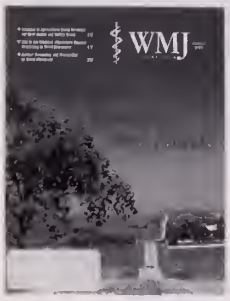

Our cover: Rural medicine has changed drastically in recent years, yet living and practicing in a rural environment poses special challenges and opportunities to Wisconsin's physicians.

Your colleagues share their experiences and provide insight into the unique aspects of country life beginning with Sandra L. Osborn's *President's Page* column on page 5.

Cover and page 6 photos provided courtesy of the Wisconsin Department of Tourism.

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President's Page

Rural Medicine: It's Come a Long Way

LOCATION. Location. Location. Any realtor will tell you that's the key to good living. Yes, we've all been told that it matters where you live, where you work and where you go to school. We have all made choices on what constitutes good living for ourselves and our families. We have city dwellers in skyscrapers. We have those raising families in the suburbs. We live in small towns with a short commute to the big city. We live in houses. We live in apartments.

Certainly there are challenges to living in any kind of environment. Personally, I've always admired those choosing to live in the country. Perhaps it is their quest to live the simple life. But I have to wonder, how "simple" do these residents really have it? Sometimes going to the corner market is a major chore. Dining out does not mean a quick stop at McDonalds. Access to prompt, reliable health care can be a major obstacle.

City folks sure know how to take advantage of the near-by grocery stores, the dozens of fast food restaurant options and the huge hospitals, clinics and independent physician offices. Rural residents, however, don't have it quite that easy. Rural families tend to live farther away from medical care facilities; simple medical needs still require a trip for care; specialty care often requires going farther and seeing an unknown physician.

It's true that with today's technology, the rural practitioner is now able to consult with colleagues in medical centers by telephone, FAX, video conference, and computer, which allows more care to be provided at the local office or hospital. However, even old problems have been replaced by new problems. For example, farm families have more difficulty in acquiring affordable insurance - - many are self-employed. For most of my patients whose parents work "city" jobs, buying a ten-day supply of Augmentin to treat an ear infection is a matter of a copay; $100 for that prescription is almost impossible for a family without adequate insurance. Neither my office nor the pharmacy deals in payment by sweet corn or chickens.

Children in rural areas also live and play in an environment of different dangers; many of which they don't understand because of their young age. The city parent's greatest fear is a busy street. Imagine a child's life on a farm with large tractors, silage storages, livestock, etc. Equipment, such as a hay bailer, is very expensive and has great potential to cause injury, but cannot be avoided if the operation of the farm is to be successful. It is quite ordinary for rural children to have access to or even operate farm equipment before they can drive cars on the highway. The entire family is often needed to help with the crops or animals during the busy season or are part of the regular work team. Anyone can be severely injured by that equipment: run over, get caught in the PTO (power take off) and lose limbs, and even be killed. Equipment inside a barn can also be treacherous and cause injury or death. Even the animals are a danger to a small child if the animal inadvertently steps on or falls on the child.

In rural settings emergency care is less accessible and takes longer to arrive; there is dwindling community participation in volunteer emergency assistance when more people also work in the city and aren't there to help; in the past the neighbors were there when an emergency occurred. In April, the National Institute of Occupational Safety and Health (NIOSH) of the U.S. Department of Health and Human Services, launched a national research program to protect children on farms from injury, illness and death. Studies estimate that about 100 people under 20 years of age are killed on farms each year and more than 100,000 injured in agriculture-related activities. Nor are adults immune to the dangers of work-related injuries and death in the rural workplace. One of the articles in this issue, by Mark Purschwitz, PhD, a nationally-recognized farm safety

Sandra L. Osborn, MD

Continued on next page

Continued from preceeding page

specialist who works at the UW-Madison, provides details about the *UW's Agricultural Safety and Health Education Program* (See page 25).

Other areas of increasing concern in rural areas include an enlarging elderly population and low Medicare funding, domestic violence (See *Domestic Abuse: Complicated by Rural Living* on page 22) and isolation, the need for more child care and expanded clinic hours because many rural families also have two working parents, and chronic mental illness with few centers for intermittent care.

Health concerns center around changes in the environment, super highways, air pollution, chemicals used in agricultural production such as pesticides and herbicides, land development, and safety of the drinking water supply. Rural health problems originate in many of the working conditions: cold weather, excess sun exposure, loud noises, bites, stings and envenomization hazards.

Indeed, health care has changed -- perhaps even more so for the rural patient. The family doctor is sometimes a clinic, the local hospital may have closed and there is no emergency room. If the family has insurance through a managed care plan, the physician choices may be few, and the local physician may now be part of another large managed care group. How does a community acquire and keep health professionals? How does the professional get CME and keep up with changes? Please be sure to see the feature article, *Life in the Country: Physicians Discuss Practicing in Rural Wisconsin*, on page 17.

I had a very interesting conversation recently during a prenatal visit with a woman who operates a dairy farm with her husband. She was interested in learning more about human colostrum. I learned about their use of colostrum from older cows which was stored frozen and recorded in the computer; then the appropriate packet could be removed and given to the newborn calf of a heifer in order to get the calf off to a better start with colostrum of higher immune value. An estimated 65% of farmers have computers today, with about 35% of them using them for business operations.

WISCONSIN DEPT. OF TOURISM

Another excellent resource that Wisconsin can claim in its efforts to develop better rural health care is the National Farm Medicine center located in Marshfield. This organization is interested in building bridges with people interested in agriculture and rural health. Guest editorials from their staff begin on page 9. World Wide Web technology is emerging as one of the more effective ways to communicate and do research. The National Farm Medicine Center has a Web site that can be accessed at: http://www.marshmed.org/nfmc. The site is designed to increase awareness of research, education, and policy and service initiatives of the center among agricultural groups and individuals.

The State Medical Society has its own Web site, WISMED, that enables physicians and patients alike to access essentially unlimited medical information. We are becoming the best resource in the state, featuring educational materials for both patient and physician, including new CME programs. The address is http://www.wismed.com.

The practice of medicine is changing - rural medicine included. Where are we going? Asking the right question is two-thirds of the way toward its answer. Let's ask those questions so we can learn what our problems are, and enable us to design answers. Let's keep in touch.❖

Letters to the Editor:

Encouragement of Partnering with Non-physician Clinicians Hurts Physician Members

I HAVE JUST FINISHED reading the June edition of your journal concerning the virtues of non-physician clinicians. As an anesthesiologist, a specialty perhaps most victimized by the blurring of distinctions between physicians and advanced nurse practitioners, I can say with complete and regretful confidence to my primary care colleagues that you will be sorry with the current winds of change. They are driven by short-term concerns, but have long-term consequences for our patients and profession. Anesthesiologists have traveled that seemingly expedient road and are now paying the price.

And as for the State Medical Society of Wisconsin, supposedly our most vociferous advocate in the Capitol, I cannot convey to you my disappointment in your actions of late which aid and abet those who have an interest in the "deprofessionalization" of the practice of medicine. With friends like you, we scarcely need enemies. Indeed, were it not for your insurance products, I dare say I would not retain my membership.

--Michael S. Bruno, MD
Sturgeon Bay ❖

SMS President, Sandra L. Osborn, MD, chair of the SMS/WNA Commission, responds:

Thank you for your recent letter regarding the June, 1997, issue of the *WMJ*. I have talked with others among our membership who share your concerns about the changes that are occurring in medical practice because the structure of our professional relationships has changed. I have also talked with members who feel that the new relationships of practice are the only thing that allows them to provide the depth and breadth of care that patients need and are requesting.

We live in a state with a diverse geography, diverse economic conditions, diverse patient needs, and diverse physician capability to care for their patients in the conditions where they practice. What supports one physician's practice can appear to damage another's.

As leader of the medical team, the physician needs to maintain a relationship with his non-physician partners that supports and enhances his/her needs in that practice in order to provide quality, cost-effective medical care to the population of patients. The nature of one's practice -- solo practitioner, small one-specialty group, large multi-specialty clinic, hospital employee, managed care employee, or state employee, to name some possibilities, influences our abilities to make decisions about those other non-physician colleagues, and our relationships with them.

We have a variety of options available to us as members of SMS to influence and understand what is happening in medical practice. A forum open to all members is our county and state societies where these concerns can be and are discussed, and where members can have direct and indirect contact with our state and national legislators to work with them in developing laws and regulations to guide the practice of medicine.

And, on a more personal, individual level, there are members who have worked through similar difficulties in their practices and are willing to confer with you to assist you in managing your particular circumstances. It is by involvement and sharing our concerns that we can improve the care that we provide to our patients, and the circumstances in which we provide that care.

I appreciate that you have taken the time and made the effort to write to us. And I sincerely hope that you will continue to work with the SMS to create the best care environment for the patients in your community. ❖

Nurse Practitioners Cannot Replace Physicians

As a retired physician, I have no concern as to the effect on my practice that nurse practitioners would have. I feel that allowing registered nurses, whose primary training is in nursing, to prescribe and diagnose is an outrage. If I were a patient, I would feel victimized.

Physician Assistants have four years of medical training but they apparently are under more supervision than NPs; I cannot conceive the rationale for this. Perhaps the reason is because the HMOs and clinics have to pay them higher salaries than the NPs, so why not lobby for more privileges for the NPs?

After retiring from family practice in Illinois, I was employed part-time in three Wisconsin rural clinics in my area. Two young, board certified family practitioners both employed by the same rural clinic, moved out of state to practice shortly after the nurse practitioner law was passed. I have no idea why they left, but, if I were a young physician in Wisconsin, I would have done the same thing. It seems ludicrous that a physician or DO who has completed four years of medical school and three to four years of residency training has no more outpatient privileges than an RN who has passed the requirements to become a NP.

NPs probably can correctly diagnose and treat over 90% of conditions seen in the clinics. But what of the remaining small percent that require the training of an MD or DO for diagnosis.

In my opinion, the contentions that the change in medical practice in Wisconsin improves the quality of care is the ultimate oxymoron. I believe that the primary reason for this change is economics, and the quality of medical care is not a consideration.

--Edward H. Abbott, MD
Plain ❖

Correction

In the photograph on page 14 of the June issue, the clinician is holding the ophthalmoscope backwards and at a much greater distance than appropriate for the exam. The *WMJ* regrets the use of an incorrect stock photo and thanks the astute readers who caught the mistake and notified us of the error.

Guest Editorials
Farm Injuries Don't Just Involve Farmers

Mark A. Purschwitz, PhD, Madison

THE 40-SOMETHING physician had recently been named chief-of-staff of a fairly large urban hospital. While out at his small farm, using a tractor to pull a log, he became the victim of a tractor rollover -- the tractor overturned on top of him, fatally crushing him.

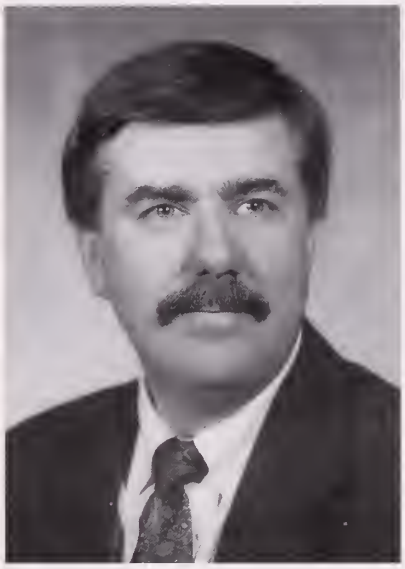
That incident occurred in Indiana in the late 1980s, when I was in graduate school at Purdue University. Since becoming involved in the prevention of agricultural injuries, I have learned of people from many different walks of life being injured or killed on farms. Besides full-time farmers, victims have included spouses, infants under the age of one-year old, school-age children, visiting relatives, physicians, university professors, county Extension agents, truck drivers, factory workers, business owners -- you name it. Farm injuries respect no one.

Each year in Wisconsin, an average of 38 people die from farm work- or worksite-related injuries. Over 15,000 people suffer non-fatal farm injuries, injuries that are serious enough to require professional medical treatment, result in at least four hours of restricted activity, or cause some temporary loss of consciousness. Of all industries in the US, mining and agriculture have the highest rates of unintentional work-related deaths, 30 and 24 deaths per 100,000 workers, respectively, compared with a rate of only 4 per 100,000 for all industries combined.

It is easy to assume that farm hazards affect only a small group of people -- farmers and their families, and hired farm workers. But farms can be dangerous places for others as well. You or your patients may visit farming relatives, or help out friends, drive a tractor lacking a rollover protective structure (ROPS), operate a machine without proper training, let Grandpa take the kids for a ride on the tractor, climb into the haymow to get a bale of straw, and share a road with farm machines.

There are many forces at work which make accident prevention difficult. Farmers are well-known for their independence and self-reliance, strong qualities which have enabled them to survive all sorts of downturns and setbacks but which can also hinder change. Self-reliance and a strong work ethic may result in children being assigned tasks that exceed their abilities to recognize hazards or make judgements when things go wrong. Caring for young children without taking them into the farm workplace can be a challenge, since both parents may have to work and rural day care is often not a convenient or desired option. Older machines and facilities can present hazards which are expensive to eliminate, especially for farmers with low net incomes.

Preventing farm-related injuries is not an easy task, and requires a community-based effort, including messages from physicians. All of us must work together to convince farm operators, and even those who just visit farms, that eliminating hazards and changing unsafe practices are the socially acceptable and smart things to do.



Mark A. Purschwitz, PhD

When farm operators hear messages about injury prevention from someone like me, an academic whose job it is to promote safety, they may not pay much attention. But when they hear the same messages from their family physicians and nurses, their local agri-businesses and bankers, their children's teachers and 4-H club leaders, there is a greater chance these messages will take root.

When you give a farmer or farm family member a check-up you can show your concern for the risks they face, and point out how important it is for them to invest some time and money in minimizing or eliminating hazards (as opposed to just "being careful"). When you do that, you help make injury prevention socially acceptable.

As physicians, you have great credibility in the farming community. It is my sincere hope that you will use this credibility to help reduce the terrible toll that farm injuries have on our farming friends.❖

Purschwitz is Associate Professor and Director, University of Wisconsin Center for Agricultural Safety and Health, Department of Biological Systems Engineering, University of Wisconsin - Madison/Extension. Additionally, he serves as President, National Institute for Farm Safety, 1996-1997.

Changes in Agriculture Bring Potential for New Health and Safety Risks

Stephen A. Olenchock, PhD, and Nancy B. Young, BSN, Marshfield

Come mothers and fathers throughout the land
and don't criticize what you can't understand.
Your sons and your daughters are beyond your command.
Your old world is rapidly aging.
Please get out of the new one if you can't lend a hand.
For the times, they are changing.
Bob Dylan, 1964

Changing Farm Demographics

Dylan's lyrics depicted times of cultural upheaval within the US in the sixties. They can be borrowed today to describe the technological and demographic changes that are occurring within agriculture in the 1990s. Along with those changes, risks to the health and safety of those who work in production agriculture may be changing as well. Those of us who are called to lend a hand through health care delivery, research, education, and prevention must first understand the changes that are shaping agriculture and the lives of our nation's agricultural workers.

Today's agricultural enterprise is markedly different than that found 100, 50 or even 20 years ago. Production is changing. Equipment is larger, faster, and more efficient. Farms are larger, more business-oriented, and technology-dependent. Animals are increasingly bred through genetic selection for production, be it milk volume, musculoskeletal characteristics, leaner meat, uniformity, or more rapid growth-to-market weight. With such change comes inevitable adaptation and stressors to the health and safety of the owner-operator, the agricultural family, hired workers, and others who interface with agricultural environments.

In the US, the top 3% of farms now accounts for the sale of 45% of the nation's agricultural products. In part, this is due to the picture of the farm that is changing dramatically. In 1960, the average size of a farm in the US was 297 acres, while the average size in 1993 grew to 473 acres. During the same time frame, the number of farms decreased from 3.96 million to 2.07 million. During the 10-year period from 1982-1992, while the total number of farms in Wisconsin decreased from 82,199 to 67,959, the number of farms with 1,000 or more acres increased from 950 farms to 1,218 farms. Thus, the number of farms is decreasing, while the size of the farms is increasing.

Concomitant with the increase in size of operations is the increase in the number of animals per farm. From 1959 to 1992, the number of milk cows per farm in the US increased from an average of 9.2 to 61.1, while the number of hogs and pigs per operation increased from 36.8 to 300.8 per farm. Excess nutrients in the form of manure and waste products, and odor and pollution control become concerns not only for the agricultural operation, but for the community at large, as well. Along with excess nitrogen and other components, zoonotic pathogens can enter the ground and surface waters and adversely affect the worker, the family, and the surrounding community. Likewise, longer hours of exposure to animals and the increased repetitive motion of such activities as three times-a-day milking of large numbers of animals can result in fatigue and ergonomic problems that beg for engineering and preventive solutions.

Larger operations require more labor, and the nuclear family may no longer be able to accomplish the work alone. Contracted and hired workers, migrant, seasonal, or permanent, are required for the modern farming enterprise. With this change in work force, worker training becomes an issue, as does general worker health and safety, along with language and cultural differences. The 1992 US Census of Agriculture counted 3.8 million workers as hired farm labor, of which migrant farm workers are a sub-population. Of particular concern to the migrant and seasonal sub-populations are issues related to adolescent workers, children at the work site, worker training, access to health care, housing, and sanitation.

Older Operators and More Female Operators

Coupled with the demographic change related to the increased

Dr Olenchock is the Director of the National Farm Medicine Center and Senior Research Scientist at Marshfield Medical Research Foundation. Ms. Young is the Manager of the National Farm Medicine Center at Marshfield Medical Research Foundation.

number of hired workers, the numbers and distribution of farm operators in the US are changing. From 1982-1992, the number of farms in the US with male operators decreased from 2.12 million to 1.87 million farms, a decrease of 11.8%. During the same period, the number of farms with females as farm operators increased from 121,599 to 145,156, an increase of over 18%. Examination of the average age of the farm operators during those ten years shows a progression from 50.5 to 53.3 years of age, with the average age of female operators as 57.6 years of age versus 52.9 years of age of male operators in 1992.

Some general health and safety concerns relate to the aging agricultural operator. A 1995 study at the Marshfield Medical Research and Education Foundation (MMREF) found that machine-related traumatic injuries were substantially higher per 1,000,000 hours worked in individuals 65 years of age and older than in other age groups in central Wisconsin. Similarly, MMREF reported in 1996 that the incidence of fall-related farm injuries was much higher for individuals in the age group of 65 years and older when compared to other age groups per 1,000,000 hours worked. With age and continuous exposures, hearing and visual acuity would be expected to be reduced and cumulative trauma, ergonomic-related damage, and chronic diseases and conditions expected to increase.

Stephen A. Olenchock, PhD

Nancy B. Young, BSN

Adverse reproductive outcomes for females on the agricultural enterprise may also be an area of potential concern. Currently, significant research interest surrounds endocrine disrupters, (agro-chemicals) which may disrupt the endocrine system and thus cause cancer or reproductive problems.

Stress is an issue that possesses the potential for serious health effects, including domestic abuse, inter-personal violence, and suicide. Stressors of job and/or lifestyle changes may occur as agriculture changes. For example, stress remains a serious issue for the farmers and families who remain small and on the fringe of economic failure. Finally, communities may continue to experience reduction in economic well-being as the number of farms decreases and/or young persons choose not to enter farming and leave the rural area.

In summary, changing demographics, the changing size of the agricultural operations, and changes in production practices predict the advent of new health and safety issues relating to the agricultural owner-operator, the family, and hired workers. As production changes, health care delivery, along with research, education and prevention activities must recognize gender and age-related issues and the new potentials for physical, chemical, and biological exposures that could change the health care strategies used today.❖

Marshfield Clinic's Role in Primary Care and Rural Health in Wisconsin

Joseph J. Mazza, MD, FACP, Marshfield

Access to care and an insufficient number of health care providers have led to significant compromises in the quality and availability of health care to many individuals living and working in rural areas of the country.

Recruitment and retention of professional providers has been difficult because of the lack of support services and facilities to render appropriate care, leading to numerous underserved geographic regions.

Limited continuing medical education opportunities and inefficient communication and resource networks to large regional centers have also made rural practice settings a less than desirable option for many physicians and other health care providers completing their postgraduate training in primary care.

Marshfield Clinic is a large physician-owned and operated, not-for-profit medical institution located in the center of Wisconsin. The Clinic has cared for and provided professional services and educational programs aimed at citizens of rural Wisconsin for more than eight decades. Its growth and diversity in the recent past have allowed it to expand its commitments to rural health.

Currently, there are more than 450 physician clinicians involved in patient care within the Marshfield Clinic System and approximately 230 individuals in the Clinic's division of research and education, many of whom are involved in rural health endeavors. These efforts continue to expand to provide and expedite care to people in rural Wisconsin. The National Farm Medicine Center and the Center for Rural Health Services Research, departments of the Marshfield Medical Research and Education Foundation, have been providing resources, expertise, and educational programs to address this commitment. Its more than 40 members and associates include physicians, behavioral scientists, epidemiologists, and environmental scientists who are dedicated to the exploration of health needs and problems that confront individuals who live and work in rural environments.

The Marshfield system of care with its 30 regional centers strategically located throughout central and northern Wisconsin provides primary, as well as secondary and tertiary, care for residents of central and northern regions of the state. This unique integrated network of clinics and resources is directly linked by state-of-the-art technology to the main center in Marshfield, allowing efficient access to specialty and subspecialty medicine.

Ongoing educational programs, consultation, and free interaction with experts in rural health and environmental medicine are readily available at the main campus. Computer linkage to the library and medical records is also available to expedite evaluation and treatment of many of the health problems associated with Wisconsin's rural population. Thus, the clinic and its division of research and education have been uniquely poised to provide special educational initiatives aimed at primary care physicians for the purpose of complementing and expanding their already existing commitment to rural health.

Joseph J. Mazza, MD, FACP

In 1974, in co-sponsorship with Saint Joseph's Hospital, we began our own postgraduate residency training programs in primary care, i.e., general internal medicine, pediatrics, and general surgery, in affiliation with the University of Wisconsin School of Medicine in Madison. In reviewing the graduates of these programs, our institution is proud to highlight the overwhelming number of graduates currently practicing primary care (73% general internal medicine and 75% general pediatrics), and although general surgery is not usually viewed as a primary care training program, 88% of those individuals who completed the general surgery program at Marshfield are practicing general surgery.

Although Marshfield Clinic/Saint Joseph's Hospital has not sponsored a family medicine resi-

Dr. Mazza is an Hematologist and the Director of Medical Education at Marshfield Clinic.

dency program in the past, it has recognized the importance of providing its wealth of clinical medicine and resources to those individuals in family practice residency programs sponsored by the University of Wisconsin. Currently, there are structured rotations for these residents and medical students at both the main campus, as well as the regional centers that make up the Marshfield system. In addition, Marshfield Clinic/Saint Joseph's Hospital have recently begun a residency program in internal medicine/pediatrics (Med/Peds) in 1995 so as to provide another group of well trained primary care physicians who will develop expertise in both internal medicine and pediatrics during their four year residencies. This type of program has become increasingly more popular throughout the country and will likely continue to expand as primary care interest grows.

These primary care residencies, along with the broad spectrum of resources and expertise committed to rural health at Marshfield Clinic, provide educational opportunities for the many health care disciplines and programs throughout the state. Recently, because of the growing interest in health care issues of farmers and their families, we have proposed a postgraduate fellowship program in agromedicine directed toward primary care physicians who have completed an accredited residency in an effort to provide additional training and education, and broaden the knowledge base and experience on health problems related to production agriculture.

We are committed to expand these endeavors so as to provide a better level of care to individuals who live and work in rural communities throughout Wisconsin. We can only hope that ample support will be made available via state and federal legislation for institutions such as ours to continue in this important quest.❖

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Rural EMS: Who are You and What do You Need?

Peter Stamas, Jr., MD, FACEP, Marshfield

MANY OF MY PHYSICIAN colleagues have a difficult time distinguishing between the various levels of prehospital providers. Specifically, I will discuss Rural Emergency Medical Systems (EMS).

What is rural? The definition is elusive and not completely agreed upon. The Office of Management and Budget considers a rural area an area not designated as a "metropolitan statistical area." The Bureau of Census has defined urban and urbanized areas. Whatever definition is chosen, prehospital rural health care is health care delivered to rural persons in a prehospital setting. The size or location of a physician group or hospital is secondary to the fact that a majority of the care provided is for rural persons and that the uniqueness of rural areas is included in any health care decisions.

Rural EMS shares similarities with urban EMS. Both are interested in timely assessment, appropriate stabilization and efficient transport of the seriously ill or injured. However, rural EMS presents additional challenges not typically seen in urban EMS.

Physician participation and involvement is necessary to both. Medical direction requires a licensed medical physician. In the past, this has often been little more than a physician's signature on state-mandated forms. The present emphasis needs to be on "active" medical direction. This requires a commitment of both time and effort. Historically, medical direction has been local. In rural areas, the number of potential medical directors is small, not unlike the numbers of local medical practitioners. With the addition of advanced skills, such as defibrillation, subcutaneous epinephrine for anaphylaxis, intubation, and prehospital medication, the need for knowledgeable, active medical direction is crucial. This commitment most likely will be voluntary, similar to that of most rural EMTs. Of the 456 EMS Provider services in Wisconsin, 254 or 57% are completely volunteer.

Physician participation also includes providing continuing education and ensuring skills retention. Rural EMS has lower call volumes and longer transport times than our urban counterpart. Therefore, necessary skills may be used less frequently in the field. However, as definitive care is further away, the need is greater. Skills retention and continuing education in rural EMS usually requires bringing the rural EMT into a physician's clinic or hospital to train or work, not unlike postgraduate medical education.

Funding is another area of need. Eighty-four percent of the nonparamedic level services in the state operate with a defibrillator. At between $3,000 and $5,000 each, it takes a great number of bake sales or raffle tickets for rural EMS services to purchase a defibrillator. Yet many of our rural EMS services purchased them in that fashion. The remaining 16% without a defibrillator are typically rural services without funding. As highly respected citizens of our communities, many of us sit on town, hospital, or bank boards, and could facilitate and educate our rural communities of this need.

Any one of these tasks can be a great undertaking for one individual. But a hospital or group practice provides potential resources. A "systems" approach is able to provide more support with less effort. A regional EMS system could provide medical direction for a number of EMS services. In addition to medical direction, it could, for example, provide similar equipment and training requirements, similar protocols, similar quality improvement methods, and similar data collection. Although defining a region may be politically difficult, it need not be. Hospitals already have regions defined by their referral patterns and ambulance response areas. Regionalization could provide significant time and talent with cost savings to both rural and urban EMS.

In summary, although difficult to define, it is not difficult to understand the greatest need of rural EMS: interested physicians. What you are able to give will be more than rewarded with the satisfaction you will receive from these predominantly volunteer services. Please give.❖

Peter Stamas Jr., MD, FACEP

Dr Stamas is an Emergency Medicine Specialist at Marshfield Clinic.

Point...Counterpoint
Physicians' Responsibility to Assess Patients' Ability to Operate a Motor Vehicle

Richard A. Dart, Marshfield

Note: The following article was prompted by the experience of one of the physicians who serves on the SMS Medicine and Ethics Commission and is meant to motivate physicians into proper reporting of disabled patients by removing guilt for their actions.

Tell us what you think

The *WMJ* wants to know what recommendations you would make. Please send us a brief note with your thoughts and recommendations to: State Medical Society of Wisconsin, Judith Burke, Managing Editor, P.O. Box 1109, Madison, WI 53701, or e-mail your comments to us at: **JUDITHB@smswi.org**. You can also send us comments via the "talkback" button on our web site (**www.wismed.com**).

We'll publish a summary of your comments and the discussion from the Ethics Commission in the next issue of the *WMJ*.

The following vignette is a presentation of an 81-year-old gentleman, well known to his primary care physician, whose relevant medical history includes well controlled high blood pressure and adult onset diabetes melitus managed by diet alone. He also has a history of minor bladder incontinence following TURP for which he takes periodic Imipramine. He has been in a stable state of health. However, on 4/14/95, it is noted by his son that for the previous six months the patient had increasing hypersomnia, forgetfulness and inattentive driving. The patient acknowledged that, in fact, he had recently driven through a stop sign although he had not had any accidents. Neurologically, he was otherwise totally intact and had no blackout spells or seizures and no signs or symptoms of hypoglycemia. His general examination was otherwise unremarkable.

Following neurology evaluation, the diagnoses of excessive daytime drowsiness, a history of snoring and indeterminate etiology, possible obstructive sleep apnea, possibly idiopathic hypersomnia, upper airway resistance syndrome and narcolepsy were entertained. The patient was advised of the dangers of obstructive sleep apnea. Memory dysfunction was downplayed by the patient and not specifically noted on the visit with the neurologist by either the spouse or son. Later, in a private telephone call to the neurologist, the son stated that his father had memory problems for at least the previous six months or so. The issue was not raised at the time of the visit because of concerns that the patient would become upset.

The patient, a very successful businessman, had been observed by the son making frequent errors in his checkbook and had finally stopped managing the checkbook altogether, had been noted to take walks and get lost, was having difficulty finding his way back to where he was staying, often had repetitive questions in conversation and had difficulty managing numbers and remembering which persons were represented by certain initials when playing cards.

Appropriate dementia workup revealed visuoconstructional and visuoperceptual deficits. These were considered well beyond that which would be expected as a function of normal aging and were considered to be of sufficient magnitude to hamper the patient in the course of daily living. A head CT scan revealed atrophy of the subcortical white matter but was otherwise unremarkable.

CPAP was initiated in June, 1995. A few days later, the question was raised as to whether the patient should be driving. He was allowed to do so for short distances but not at night. Two months later, the patient discontinued his CPAP therapy, his condition worsened, and it was recommended that he be seen by the neurologist.

Two months after, the patient came in complaining that the whole CPAP issue was a "rip off." His evaluations to date were reviewed, but the patient desired not to resume CPAP. The patient did not feel he had any trouble with sleep apnea or dementia and refused to go through any further diagnostic testing or follow recom-

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Dr Dart is vice chair of the department of hypertension nephrology with Marshfield Clinic. He is a member of the SMS Commission on Medicine and Ethics.

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mendations with regard to treatment.

Two months later, he was willing to undergo neuropsych testing which again confirmed neuropsychological deficits beyond function of aging. These findings were stable. The neuropsychologist felt the patient should discontinue driving.

In December, 1995, the patient was involved in a motor vehicle accident, and the neurologist subsequently indicated he would direct a letter to the Department of Transportation (DOT) with the recommendation that the patient be prohibited from driving. The primary care physician was in concurrence with this.

The patient was seen on 12/22/95, had resumed CPAP and had stopped driving. Serial follow-ups by his primary care physician and neurologist noted increased improvement in attitude, he was less drowsy and was taking his medications. The DOT recommended the patient undergo retesting for driver's license renewal, and medical records relevant to the issues were submitted to the DOT by the neurologist. At the time of the visit, the patient was again reported to have problems with simple cognition -- balancing the checkbook and remembering his own children's names.

On 2/7/96, the patient called his primary care physician and the neurologist to ask why his driver's license had been suspended, and the issues were discussed with him. Although improvement had been noted with CPAP, reassessment in four to six months with neuropsych testing was suggested. If there was failure to improve on further deterioration, neither physician would be able to support the patient's request for reinstatement of his driver's license.

On 4/4/96, retesting was undertaken with cognitive dysfunction remaining and unchanged. He was advised to continue CPAP. The patient remains on his medication, is being followed in the clinic and is still not driving. Although grudgingly so, he has accepted his situation with some greater understanding.

This vignette serves as an example of a clinical situation wherein the physician is obliged to not only look after his patient's well-being but also that of society's needs. It is a situation wherein the patient cannot recognize that he has a deficit but which is brought to the attention of the physicians by family members. In addition to protecting the patient's well-being, this vignette serves to emphasize the responsibility of the physicians in the overall assessment of the patient for his capacity to drive a car.

Of course, we don't want to "turn our patients in," to "blow the whistle" on their driving privileges. After all, we are their advocates, their friends. They trust us with the most intimate details of their lives, and the question of confidentiality is taken for granted. How could we ever betray this trust by reporting them to the Department of Transportation because we have the feeling that they may be an unsafe driver?

- Do you think the ethical reality of the situation transcends our need for patient confidentiality (the principle of non-maleficence) and respect for our patient's autonomy?
- Do you think there is a larger and more prominent overriding responsibility to society that must guide us when we realize that one of our patients may have developed a problem that would make them unfit to be operating a motor vehicle?
- Is this part of our "duty to warn" that makes it necessary for us to notify authorities in the same way we have the duty to warn someone of a threat that may have been made against them?❖

Life in the Country: Physicians Discuss Practicing in Rural Wisconsin

Marc Kennedy, special to *WMJ*

When he was recruited by a clinic in northern Wisconsin, the timing was just right for internal medicine specialist Dean Funk, MD, then in private practice in the Chicago suburbs.

"I was looking for an alternative, something different," said Funk.

"I was tired of being in the city, and was toying with the idea of getting back into academic medicine when I was contacted.

They were looking for a family practitioner with OB experience who would relocate to Park Falls."

Funk took them up on the offer: the clinic hired him and paid for a year's training in Rockford.

"I focused on obstetric field medicine, including cesarean and high-risk deliveries," he explained.

"After that, I felt like I could handle it in the boonies."

That was more than a year ago. How does Dr. Funk like it "Up North" so far?

"I feel like I'm really practicing medicine. I get to do what I was trained to do. I feel more like a real doctor," he replied.

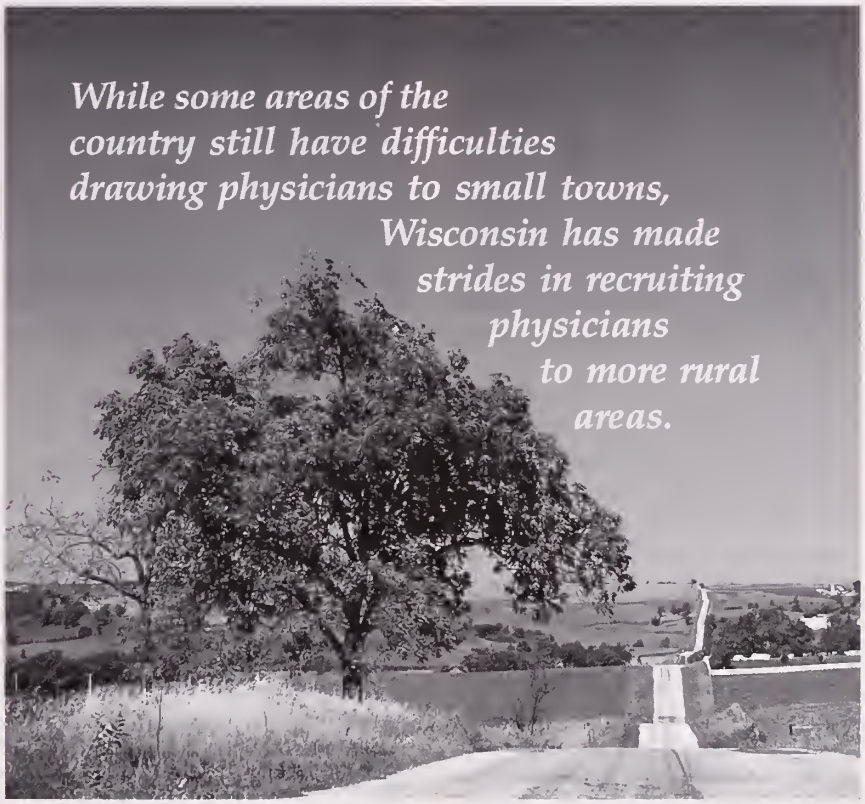
"I get to do things I rarely did before: surgery; C-sections; even setting casts myself, for instance. I can be more creative here; go to the limit here.

"And, I get to know my patients very well, from prenatal all the way up; I get to see children develop. You really get intimate with the family."

But the best part for Funk may be a little closer to home.

"I was a little worried at first of how they would deal with it, but my wife and kids love it here.

"It's wonderful. The seasons are so dramatic, and we see all types of wildlife: porcupine, deer, even bears."



WISCONSIN DEPT. OF TOURISM

Here a Year, or Forever

Funk has become one of a growing number of physicians in Wisconsin who either moved to a rural area or small town or chose to practice there out of residency. Most are affiliated with a hospital or group clinic, rather than operate as solo practitioners, who have diminished during the last two decades.

"This is true nationally as well as for this region," said William Hocking, MD, an oncologist/hematologist and president of the Marshfield Clinic.

"There still are isolated family practitioners in small towns, but they are finding it harder to sustain practices without being affiliated with larger groups or hospitals."

Though some areas of the country still have difficulties drawing physicians to small towns, Wisconsin has made strides in recruiting physicians to more rural areas.

"We have done a better job recently in finding creative ways to attract and retain physicians," said Hocking, who had been at UCLA for ten years prior to coming to Wisconsin in 1983.

"The dramatic shift toward demand for family practitioners reflected by the health care reform

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Marc Kennedy is a freelance writer living in Madison.

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movement helped. But, it's still a challenge for us.

"Admittedly, it is a unique environment weather-wise, which may eliminate certain people, but may help attract others. It's a lifestyle you either love or don't. "When I came here from Los Angeles, our friends there thought we were crazy. But my family and I have enjoyed it from the beginning. We like not having the hassles of living in the big city. Big city stress is eliminated."

Hocking admits that some complain that there are not enough good restaurants or symphonies, but he is willing "to weigh that against peace of mind knowing that it's a good place for kids.

Part of that also has to do with the culture of central Wisconsin. There's a desire to help your neighbor, a concern for others that I think you don't see in big cities. As they say, you are either here a year, or forever."

Funk agrees that there is something inherently appealing and invigorating about living and working in a bucolic environment.

"There is a big contrast with practicing here and in the city," he said. "You are accessible by beeper and phone if needed, certainly, but you can enjoy yourself. I find my spare time is much more relaxing.

"I think I'm a better doctor here because I can relax; I think my patients are getting better care.

"Besides, I have three kids, and it's a great place for them to grow up without the dangers of big cities. I like the culture of a small town; in the city, you don't know anyone. Here, everybody knows everybody else."

Practicing Personal Medicine

It takes more than a small town atmosphere to draw physicians to towns like Park Falls, Minoqua and Marshfield. It's also the desire to make a difference in those communities by providing quality medical care to their patients.

William G. Hocking, MD

Dean T. Stueland, MD

"I like getting to know my patients well," said Mark Belknap, MD, of Ashland.

"The personal relationship that develops is something I enjoy. Plus, there just seems to be fewer problems. In a small clinic, it's easier to get things done; there isn't a cumbersome bureaucracy. The biggest hassles I encounter are reimbursement for Medicare and Medicaid."

Hocking concurs that small town clinics are oriented to caring for patients rapidly and efficiently. "We've developed systems that allow patients to be handled as outpatients quickly. Many have come long distances to either Marshfield or one of the satellite clinics. So, we must offer effective ambulatory care."

Accessibility is Key

As a geriatric specialist, Mark Belknap, understands the frustrations of accessibility to health care for many of his patients.

"Most of the appropriate services are available here, and we know where the elderly patients are," said the Ashland physician.

"But our patients come from a large geographic area, up to 75 miles away or more. It's not always easy for them to get here to Memorial Medical Center.

When the weather is bad here by Lake Superior, 40 miles is a long way to go, especially in the dead of winter."

Long distance travel is an aspect that Wisconsin shares with other states with significant rural populations. A low-density population spread over hundreds of square miles often translates into hours on the road for patients visiting specialists; and sometimes, even for those requiring routine care.

"This is a particular problem for elderly patients," said Hammel.

"In larger towns, there may be taxis. In Minoqua, for people living nearby, we have a shuttle van. But those farther away have to drive themselves or rely on family members.

"We have huge catchment area," she said. "I see patients here from one or two hours away. In winter, the drive can be tough, especially on older folks."

To help reduce the need for long drives, regional medical centers can help address many health care needs. But when specialists are required, it can mean a longer

drive.

"We have a larger population base here, especially during the summer, when tourists increase the area from about 20,000 to 120,000 people," she continued.

"So, we have a number of specialists on staff — surgeons, cardiologists, oncologists, among others. In that way, we are unlike many rural areas.

"Some hospitals in this part of the state don't have a CT scanner, so we get some of their patients who require such tests."

By the same token, the Minoqua center will send specialists on outreach visits regularly, which helps limit travel for patients that don't require immediate attention.

"Some of our physicians — for example those in orthopedics, urology, ENT — will visit other area clinics weekly to help reach other patients."

Despite having various specialists available, some still must travel further for certain care.

"The nearest radiotherapy capability is in Rhinelander, which will add significant drive time for many. Still, it is shorter than driving to Minneapolis, Marshfield or Milwaukee."

Belknap also sees problems of access to health care not because of distance or weather, but due to financial limitations.

"There is a problem of access due to lack of universal coverage at the moment," he said. "The payment environment is changing all the time, from this service network to that managed care concept. It amounts to limitation of availability for many people."

Seasonal employment during the summer ironically may mean, for many, a lack of benefits.

"Sure, there are plenty of low-paying, entry-level jobs during the summer, but these usually don't offer insurance. So, people work, but end up losing the benefits they might have received during the winter while on assistance."

While health care may not always be convenient, those who live up north seem to learn to live with it, according to Funk.

"These are hardy folk who like living up here. Traveling some distance doesn't seem to bother them."

Farm Equipment Causes Injuries

Though the diseases and conditions physicians treat remain similar to those they might treat in urban settings, emergency and trauma cases may differ in rural areas, mainly because of farming and industries such as lumber and tourism. With farming, accidents usually involve animals or machinery, are often due to substandard safety controls and are frequently exacerbated by fatigue associated with long hours.

"We sometimes forget that animals, mainly cattle, are a common cause of injuries in rural Wisconsin," according to Dean Stueland, MD, an emergency medicine specialist and Medical Director at the Marshfield Clinic's Farm Medicine Center.

"Animal injuries occur more often, but they also tend to be recoverable. With the more serious trauma, machinery is the culprit.

"It's analogous to blunt trauma versus penetrating trauma. In city ERs, they may see more penetrating trauma, mainly gunshot and knife wounds. But in the country we see more blunt trauma, related mostly to farming. Farm injuries are almost always blunt trauma. Arguably, these are harder to manage because it's often difficult to determine the extent of injury.

"It's important to remember that even in rural environments, serious accidents remain a small percentage of total cases. However, these incidents do consist of the most serious cases physicians see, related to rollovers, machinery accidents, etc."

Programs established at Marshfield attempt to document

Mark K. Belknap, MD

the nature of common farm injuries and how to treat as well as prevent them.

"We are proud here that we have been looking at these issues for about ten years," added Stueland.

"We have been somewhat of a leader in training EMTs how to best deal with farm accidents, to mitigate damage at the scene. We have also been involved in surveillance, of looking at the risk factors related to farm accidents."

This falls into two categories: how to make machinery safer, and how to best inform farmers of methods to conduct their agribusiness operations more safely.

"Much of the evidence we've compiled indicates that many machines are not up to minimum original safety features."

"And often even when they are, it is insufficient. Farm machinery should be built as safe as possible."

For example, the Farm Medicine Center has been researching safer ways of hitching equipment to vehicles, and of the efficacy of mounting proximity sensors on them to alert drivers that something — or

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someone — is close to the machinery.

They are also targeting farmers and their families, said Stueland.

"We are focusing on economic aspects of farming, reminding farmers that they are their primary commodity and that they need to take care of themselves.

"We also target their children and spouses, running safety programs in camps, farm groups, county fairs, anywhere we can get their attention."

Both approaches are complimentary, said Stueland, and one point seems to get attention: the financial return on practicing caution is huge.

Rural Emergencies

The types of conditions and emergencies rural health care providers see often depends on their location and on the time of year.

"I spend a lot of time in the ER in summer," said Laura Hammel, MD, an internal medicine specialist at the Lakeland Clinic in Minoqua about high tourist season.

"We have a running tally on fish hook injuries, averaging about 250 each summer. There is a board on the ER wall filled with fish hooks. Patients can donate their hook and receive a card making them members of 'the People Catchers' Club.' They're kind of embarrassed at first, but then they find that they are not the only ones, so they take it better."

Winter produces other types of injuries and the trauma conditions that tend to occur are not taken as lightly.

"Every winter, we see more than 250 snowmobile accidents," explained Hammel solemnly. "High speed is the bottom line cause, though alcohol often plays a role."

Funk and his colleagues see similar types of problems.

"We get snowmobile accidents in winter and boating and fishing accidents in summer. In timber country, we get chain saw and wood preparation injuries, some nasty cuts."

Hocking added that car accidents provide a significant amount of trauma work for rural practitioners.

"Per mile driven," he said, "county roads are more dangerous than other highways. Plus, they may occur in the middle of nowhere, making it difficult for ambulances to get to them."

In light of these types of emergencies and the fact that they often occur in isolated areas, physicians rely on emergency medical technicians to reach and stabilize accident victims. This means special training for rural EMTs to handle trauma common to these areas. (Please see *Rural EMS: Who are You and What do You Need?* by Peter Stamas, Jr., MD, on page 14.)

> *"We have been somewhat of a leader in training EMTs how to best deal with farm accidents, to mitigate damage at the scene."*
>
> Dean Stueland, MD

"Most volunteer EMTs don't respond to a lot of calls personally. But nearly all small towns or groups of towns have an EMT Service. So a medical director will have to spend time with all of them in training and updating them on new techniques and issues to make sure they are prepared," said Hocking.

"It takes time and money for the medical directors to work with each ambulance and group of EMTs."

Marshfield Clinic does have a helicopter, which can transport victims in need of more intensive medical care, but the vast majority of injured or sick people are going to be transported by ambulance.

"Sure, having a helicopter comes in handy in some situations. But if you step back a second, it's hard to use a helicopter in a rural environment as primary response. Someone has to find the victim first," said Hocking.

"And you need someone on the scene to ascertain whether a helicopter is needed. And that would be an EMT in an ambulance on the ground."

Sound, Soot and Sun

Other problems pose longer-term health risks for farmers, he added, including noise, exposure to chemicals, and sunlight.

"Noise is an insidious problem. It involves low-level exposure that occurs over many years. It leads to hearing loss and produces additional morbidity such as high blood pressure, and it can lead to inattention, which can contribute to accidents."

Though pesticides and herbicides are used in agriculture, it is the naturally-occurring chemicals that concern Stueland.

"Dust and fungus in silos can lead to serious medical problems or accidents; the fact that they are natural doesn't make them any less harmful."

Another long-term risk for farmers and other outdoor workers like foresters is excess exposure to sunlight, said Stueland, which can lead to melanoma. The Farm Medicine Center has worked for years with farm groups to mitigate sun exposure by experimenting with different types of headgear that protect the face and neck.

Distance Challenges Rural Health Care Providers

"The big challenge in rural areas is how can you provide the higher levels of resource intensive care, in a rural environment with a low pop[ulation] density without major urban centers," said Marshfield Clinic's Hocking.

"That type of care requires infrastructure, [the]volume of care to make it cost effective to support advanced personnel and technology.

"It's difficult to do that, and do it properly in the context of anti-trust laws. Often, in these cases we need to collaborate, rather than compete, but this is something that is evolving in a way that addresses how to best provide the services to people in the country."

"We're trying to get care as close to patients as possible, so they won't have to drive 150 miles in the middle of winter," added Hocking.

"We can do this with satellite clinics providing primary care, with more complex levels of care available at Marshfield or other secondary or tertiary care centers.

"Now, we are offering secondary services in Minoqua such as oncology and surgery, and hope to expand these in the future."

However sophisticated regional services become, though, there will always be a difference between care available in the country and care available in the city.

"Sure, we can offer people a lot," said Funk. "We can handle 85% of medical care right here in Park Falls. But at some point, there will be a need to send a patient outside to see a specialist or have a test run.

"It's something you have to face — at that point the same amount of care is just not available here as it is in Madison. There isn't the money to pay for all the high tech care."

The logistics of providing health care are evident in other areas as Funk describes, "Having women get routine mammograms poses a problem in the country," explained Hocking.

"If you have to drive 40 miles to get one, you won't consider it."

Telemedicine: Boon or Buzzword?

Telemedicine, the capability of using technology to share information and keep in touch with distant patients and colleagues is being touted in some circles as the wave of the future.

Already, distant clinics can share test and X-ray information, and physicians can consult specialists by e-mail or attend grand rounds presentations hundreds of miles away via videoconferencing. But will it mean better care delivery in rural America?

"At this point, we don't do much more than transmit X-rays," says Belknap.

"I can see it[telemedicine] having many useful applications in the future as it develops, but at this point it seems more hype than help."

Hocking agrees that tele-medicine has become somewhat of a buzzword, but he appreciates the value in current administrative applications, and believes that in time more clinical applications are to come.

"We have 380 doctors on our board at Marshfield, spread out in 30 regional centers," he explained.

"For us to meet monthly in a cost-effective way, we use videoconferencing, which works well."

The best example of using telemedicine clinically is the weekly Tumor Conference, also done by televideo.

"We can transmit, share and discuss pathology reports, X-rays," he said.

"We can hold clinical discussions and review unusual cases. We have an excellent turnout, and keep well connected with oncologists at other centers."

Down the road, Hocking says he can see systems such as teleradiology, or digital radiology, and maybe even teledermatology as enhancing care in rural Wisconsin. But, it will always be a matter of taking the best advantage of economies or scale and effectiveness when considering new technology.

Funk believes it is vital to develop new methods to share information, but for the moment, existing technology works just fine.

"If I have a difficult problem, we just get on the phone with a perinatologist."

Keeping Them Down on the Farm

While many rural areas of the country remain underserved, Wisconsin has several programs and incentives designed to attract and retain physicians in these areas.

For example, Marshfield, the parent organization for the Park Falls clinic, covered the costs for Funk's year of advanced OB training. Still, it is a market-driven economy, and even special programs and incentives don't always work.

"We used to have trouble, and still do to an extent, in recruiting in certain specialty areas. But now we seem to be having a little more difficulty finding primary care physicians because of the high demand during the last four or five years," said Hocking.

Programs with the University of Wisconsin Medical School and the Medical College of Wisconsin place residents in short-term rural rotations to give them a taste of country living and an idea of what rural practice is like in hopes of attracting those who may have what it takes to thrive in a small town atmosphere.

"The important thing is to give medical students a chance to experience working in places like Park Falls," said Funk.

"We get residents here for six weeks. They do everything: taking on-call duties, delivering babies.

You can see it in their eyes if they are interested. It's just that simple; you either want to practice here or you don't. Those are the people who at the end of their rotation ask if we're going to be having any openings soon."

The ones who won't miss the symphony that much, who like the idea of seeing a bear every now and then, and don't mind that everybody knows who they are.❖

Domestic Abuse: Complicated by Rural Living

Jeremy Pittenger, contributing editor

911 Dispatcher: "What's he doing?"
Woman: "He's coming in the house."
911 Dispatcher: "Does he have any guns?"
Woman: "He's got a gun!" (screaming) "No!" (more screaming). . . .

"No."

The last spoken word of Marie Hamann, a 22-year old mother from the small, rural town of Dorchester in north central Wisconsin, was one of fear. Last month, Marie became one of the 42% of murdered women who are killed by their intimate male partners. Her 3-year old son, Dwayne, was also killed by her husband with a gun shot to the face.

Marie's husband, Dale, came to her trailer a little before ten o'clock on a Saturday evening. He had been released from jail just hours earlier after being arrested on suspicion of battery, disorderly conduct and violation of the restraining order that Marie had filed against him two weeks earlier.

After falling off his motorcycle, stumbling to the door, and breaking in the trailer, he approached Marie while she was on the phone with a 911 dispatcher. Trying to flee with her little boy, Marie and Dwayne were shot.

Obstacles

"It's awful," says Terry L. Wahls, MD, an internist with the Marshfield Clinic.

"Here's a woman who followed the appropriate steps. She came to the Emergency Room at the Clinic when she was beaten in the past; she reported her husband to the police; and she filed a restraining order against him.

How this man could have been released the same day he was jailed in the first place is beyond me. I think it clearly says something about our legal system. Surely, a restraining order has its limits."

Dorchester has a population of about 700 people. It's a town similar to most rural communities where everyone knows each other, where it's usually quiet and it's relatively isolated from city amenities.

Unfortunately, it is these small town characteristics that can become extra burdens to victims of domestic abuse.

"Being physically isolated -- living a great distance from shelters and medical facilities -- are great problems for victims of domestic abuse," according to Robert K. Gribble, MD, an obstetrician/gynecologist with the Marshfield Clinic.

"It becomes easier for the abuser to isolate his victim in a small, rural community."

The rural victim especially, knowing almost everyone around her, is also less likely to seek help from others. The chance of her knowing the clinic workers is high. Everyone appreciates the right to privacy, and the threat of losing confidentiality limits some from getting the help they need.

"In such cases, I urge patients to talk with their clergy which I feel is a good option," says Gribble. "I also do my best to refer them to a domestic abuse service agency which can be found in different areas of the state -- although here is where the problems of transportation and accessibility occur."

Just Leave Him

Unfortunately, it may be these same clinicians, family members or friends who simply inquire, "Why don't you just leave?"

As the case of Marie Hamann proves, it's not as easy as it sounds. Twenty-eight percent of domestic abuse homicides involve those who have left their abuser.

In addition to overcoming the initial separation, victims must have financial resources and shelter in order to survive. They must be able to plan ahead for themselves and their children. In many cases the abuser "punishes" the partner by taking away certain privileges, such as the family car. In rural areas, getting help can be very difficult without transportation. Buses don't stop on each street corner and train stations are almost non-existent.

Reaching Out

How do physicians help victims of domestic abuse?

"By bringing the issue up," says Wahls.

"Years ago I would never ask a patient if they were experiencing hitting at home, even if it was obvious.

"However, my comfort level with asking has definitely increased. I have become sensitized. I have attended meetings and programs about how to approach the subject. Now I ask everyone who is under my care -- and I have received positive feedback for my efforts. There have been many times a patient has told me that she was glad I asked.

"And if a patient says "no" and it is obvious that she has been abused, I ask again. I'm persistent.

"More importantly, I convince the patient that I am a safe person to tell. Eventually their comfort

level with me increases."

Doctor Wahls doesn't just ask though. She puts them in contact with domestic abuse counselors and shelters while the patient is at her office.

"It's not enough to just say, 'Here's a number to call later.' You have to dial the phone for them, you have to put the telephone receiver to their ear.

"In rural areas, this is the one time the patient may be able to get out of the house for a long time. With abusive relationships there is no privacy. The opportunities to make such calls at home are few and far between."

Doctor Gribble agrees. "We need to be more forthright. As an OB/GYN, I must be tuned in to these situations and problems."

He relies on programs such as Marshfield's Family Health Center, to educate himself, his staff and his patients. The Health Center is located in the Marshfield Medical Complex and is under the direction of the Marshfield Domestic Abuse Committee.

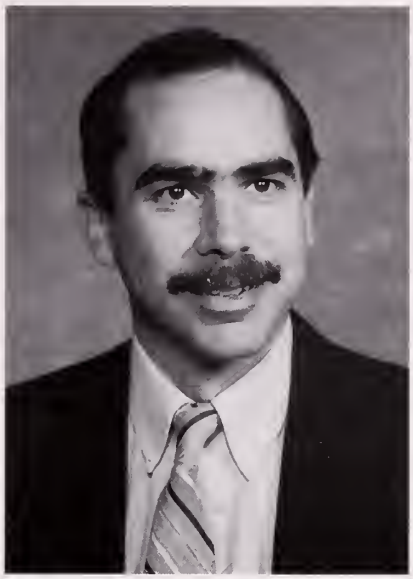
"We have excellent programs at Marshfield," says Gribble.

"Our human resource department has presented seminars for our employees and our patients. I find it to be very important that everyone from our receptionists to our nurses to our doctors be educated on this area."

The Health Center also sponsors brochures, posters and resource manuals which are distributed to all regional clinics and HMOs in north central Wisconsin.

One idea Doctor Gribble endorses is that of the employee assistance programs. These programs educate the public about domestic abuse, but they do so in a work environment.

Terry L.Wahls, MD



Robert K. Gribble, MD

"In rural areas this works great. It gives patients the opportunity to receive information they would normally not have access to outside the workplace."

With more than one in three Americans witnessing some kind of domestic violence, it is clear that this abuse has no geographical boundaries.

Physicians, perhaps unlike other professionals, understand the importance of education both for themselves, and their patients. A physician's role in providing patients with the support they might need, taking that one opportunity to raise the subject of domestic abuse, is crucial.

Physicians practicing in rural areas are helping to overcome the challenges of this social dilemma. They are doing so through communication and persistence, offering the kind of treatment that every patient needs and deserves; offering treatment to the Marie Hamanns everywhere.

For more information about domestic abuse, contact: National Domestic Violence Hotline - **1-800-799-SAFE**. Online, see the Family Violence Prevention Fund at: http://igc.apc.org.

Wisconsin Domestic Abuse Agencies HELPLINE Numbers:

Adams	608-339-8196
Antigo	715-623-5177
Appleton	414-832-1667
Ashland	715-682-9566
Baraboo	608-356-6500
Beaver Dam	414-887-3785
Beloit	608-364-1083
Chippewa Falls	715-723-1138
Eau Claire	715-834-0628
Elidiorn	414-723-4653
Escanaba, MI	906-789-9207
Fond du Lac	
FAVR	414-923-1700
St. Agnes Program	414-929-1303
Green Bay	414-432-4244
Hertel	715-349-2195
Iron Mountain, MI	906-774-1112
Ironwood, MI	906-932-4990
Janesville	608-752-2583
Kenosha	
Domestic Violence Project	414-656-8502
Women's Horizons	414-652-1846
Keshena	715-799-3861

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Kewaunee	414-388-0811
Lac du Flambeau	800-236-7660
La Crosse	608-791-2600
Ladysmith	715-532-7089
Madison	
Dane Co. Advocates for Battered Women	608-251-4445
Family Services	608-252-1325
LAVENDAR	608-233-7447
WEAVE	608-258-0077
Manitowoc	414-684-5770
Marinette	800-956-6656
Marshfield	715-384-2971
Mauston	608-847-4610
Medford	715-748-3795
Menomonie	715-235-9074
Merrill	715-536-1300
Milltown	800-261-7233
Milwaukee	
ASHA	414-445-ASHA
Daystar	414-228-8887
Milwaukee Women's Center -	414-272-6199
Sojourner Truth House -	414-933-2722
Task Force on Battered Women & Kids	414-643-1911
Monroe	608-325-7711
Neenah	414-729-5727
Odanah	715-682-8379
Oconto	800-956-6656
Oneida	414-869-4415
Platteville	608-348-5995
Portage	608-742-7677
Prairie du Chien	608-326-0299
Racine	414-633-3233
Rhinelander	715-362-6841
Rice Lake	715-234-3868
Richland Center	800-236-HEAL
River Falls	715-425-6751
Saukville	414-284-6902
Shawano	715-526-3421
Sheboygan	414-452-8611
Stevens Point	715-345-6511
Sturgeon Bay	414-743-8818
Superior	715-392-3136
Viroqua	608-637-7007
Waukesha	414-542-3828
Waupaca	715-256-0336
Wausau	715-842-7323
Wautoma	414-787-3889
West Bend	414-334-5598
Whitehall	715-538-2311
Wisconsin Rapids	715-421-1511

911 telephone transcript of call from Marie Hamann to 911 dispatchers on July 5, 1997.

D - Dispatch
H - Marie Hamann

D: Clark County Sheriff's Department.
H: Hi, this is Marie Hamann calling. I am calling to report that Dale Hamann is here and he has a restraining order against him. Could you send someone over right now?
D: Okay, he's there right now?
H: Yes, he is, he's with me.
D: What's the address?
H: Um, Evergreen Terrace, Lot 1, Dorchester.
D: Okay.
H: Please hurry.
D: Yep, okay. What's he doing?
H: He's trying to get into the house.
D: He's trying to break in?
H: Yes. Hurry up please.
D: Okay, hang on. We're getting somebody coming, okay?
H: Okay.
D: Just stay on the line with me here, for a second, okay?
H: Okay.
D: You might want to get Colby-Abby too.
H: (Baby crying) It's okay honey, I know you're scared.
D: Okay, Marie, what's your ah, what's your date of birth?
H: 9/26/74.
D: What's the phone number?
H: 654- (Baby crying, can't understand) 5097.
D: Okay, I have 654-
H: I, I gotta go. He's coming in the back door.
D: Don't. What's the phone number?
H: 5897
D: Okay.
H: Okay.
D: Don't hang up on me, okay?
H: Okay, he's trying to get in the back door.
D: Okay, he's trying to get in the back door?
H: (Baby crying) What's that?
--Two banging sounds--
H: I need to leave now
D: Okay, we're getting people coming there, okay?
H: Okay, he's in the house now.
D: Okay, he's in the house now?
H: Yes, I gotta go.
D: Don't. . . Don't hang up!
H: Okay. . . (can't understand). . .
D: What's he doing?
H: He's coming in the house.
D: Does he have any guns?
H: He's got a gun! (screaming) NO! (more screaming)
--ONE GUN SHOT--
(more screaming. . .baby and Ms. Hamann screaming)
D: Oh my God, ma'am?
2nd Dispatcher: Another gun shot.
--THIRD GUN SHOT--
D: Another gun shot.
2nd Dispatcher: Okay, just stay on the line with me, you're okay, don't try. . .
(Radio Transmission)
D: Hello?
--FOURTH GUN SHOT--
D: Another gun shot.
(Dial Tone)
D: We're calling 522.
(Dial Tone, phone dialing, busy signal)
End of Tape.

Note: I spoke with Captain Mark Cattanach of the Clark County Sheriff's Department on their policy for dealing with 911 telephone calls.

"The policy of keeping 911 callers on the telephone as long as possible is standard procedure especially in cases of crimes in progress," said Captain Cattanach. "Keeping the caller on the phone helps the dispatcher collect vital information that can aid the police in determining how many officers should be sent to the scene and help them approach the site of the crime. In this case, a crime in a home, the caller can provide crucial information about the layout of the building, the victim(s) location inside the building, etc."

Captain Cattanach said that as a result of this case, the department is looking at its policies concerning domestic violence. Specifically, they are reviewing procedures for restraining orders and how the authorities might deal with domestic abuse suspects differently. --JP

Invited Paper

University of Wisconsin Agricultural Safety and Health Activities

Mark Purschwitz, PhD, Madison

Introduction

The College of Agricultural and Life Sciences (CALS) of the University of Wisconsin-Madison, in conjunction with the University of Wisconsin-Extension (UWEX), is quite active in agricultural safety and health education. CALS and UWEX have a long history of such activities, and CALS researchers are becoming more involved in related research as well. This article provides a brief history and focuses on current or recent outreach and research.

Agriculture is a dangerous industry, in Wisconsin and across the country. University of Wisconsin (UW) records indicate at least 192 Wisconsin farmers, farm workers, and farm family members died from work- or worksite-related injuries between 1992 and 1996. Annual totals and rates have been slowly declining (see Table 1). Table 2 gives a breakdown by age; Table 3 a breakdown by agent of injury. A recent University of Minnesota study indicates that one non-fatal injury occurs for every five farms each year, or more than 15,000 injuries annually in Wisconsin. These figures include only work-related injuries severe enough to require professional medical treatment, result in four hours or more of restricted activity, or cause loss of consciousness or amnesia. The extremities and back were most likely to be injured; sprains/strains, contusions, and lacerations were the most common types of injuries.

The UW recognized early on the need for farm-safety education. Randall Swanson was hired by UW in 1943 as the first full-time agricultural safety specialist in the nation. Later in the decade he was joined by specialists in several other states. Because so many farm injuries involved farm machines and structures, these specialists, including Swanson, were typically hired as faculty of the agricultural engineering departments of their state land-grant universities.

Swanson started many community-based activities, building on the strengths of the Extension system (which bases one or more agents in every county) and involving such groups as Extension Homemakers, county Farm Bureaus, Future Farmers of America chapters, and 4-H clubs. In addition to hearing presentations by Swanson and using materials developed by Swanson and others, people participated in public speaking contests, tractor driving contests, farm inspection programs, and media promotion activities which received statewide attention. Many of these activities were geared toward farm youth.

Over the years these activities have evolved into the present outreach programs. The UW provides the lead in youth tractor- and machinery-operation certification programming. The UW and the Wisconsin Department of Agriculture, Trade, and Consumer Protection (DATCP) sponsor a statewide

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Purschwitz is Associate Professor and Director, University of Wisconsin Center for Agricultural Safety and Health, Department of Biological Systems Engineering, University of Wisconsin - Madison/Extension. Additionally, he serves as President, National Institute for Farm Safety, 1996-1997.

Table 1. Annual Wisconsin Farm Fatalities and Rates, 1992-1996

Year	Total	Rate (per 100,000 workers)*
1992	50	45.0
1993	40	32.7
1994	31	26.1
1995	36	28.3
1996	35	31.1

*Number of workers based on USDA National Agricultural Statistics Service published statistics; 1996 estimated.

Table 2. Wisconsin Farm Fatalities, 1992-96, by Age of Victim

0-4:	10
5-14:	14
15-24:	20
25-44:	27
45-64:	55
65+:	66
Total:	**192**

Table 3. Wisconsin Farm Fatalities, 1992-96, by Agent of Injury

Tractors:	70
Other Machinery:	54
Animals:	17
Falls:	9
Confined Spaces:	9
Wood cutting:	8
Trucks (on farm):	6
Electrocutions:	4
Other:	15
Total:	**192**

Examples of "Other" fatalities include trench collapse, structural collapse, struck by flying object, exposure to cold, heat stroke, drowning, lightning strike, explosion, burns, smoke inhalation, work-related gunshot (while shooting varmints), and injury while riding an ATV for work purposes.

Continued from preceding page

pesticide applicator training program. Competitive grants now fund a program to provide technical assistance to farmers and farm workers with disabilities, and an applied agricultural safety and heath research program is underway.

Wisconsin Act 455, which deals with agricultural safety and health, created the University of Wisconsin Center for Agricultural Safety and Health. Funded primarily through UW-Extension, the Center is a joint effort of UWEX, CALS, and the UW-Madison Department of Biological Systems Engineering (BSE, formerly Agricultural Engineering), where it is housed. The Extension Agricultural Safety and Health Specialist serves as director.

The Center's mission is to respond to the safety and health needs of the farming community. Its primary objectives are to develop and coordinate a youth tractor- and machinery-operation certification program, and to develop and promote other farm-safety activities around the state. The Center also serves as an umbrella organization for all agricultural-safety and health outreach and research activities within BSE.

Current Outreach Activities

Wisconsin Safe Operation of Tractor and Machinery Certification Program

More than 2,500 youth in 65 counties were enrolled in this 24-hour training program in 1996. State law requires youth under the age of 16 to hold a certificate of training in order to operate tractors or other farm machinery on a public road. County agricultural and 4-H youth development agents as well as agricultural education instructors and hundreds of volunteers were involved as instructors. The Center provides curriculum development, training, and educational resources for the instructors.

County Farm-Safety Grants

The Center administers a state-funded program of county farm-safety grants. The state provides $20,000 each year for grants up to $500 per county; counties must provide matching funds. Virtually any entity in the county can apply for these grants, but must coordinate with the county Extension office or other agencies with farm-safety expertise.

Examples of grant-funded activities include the tractor- and machinery-operation certification programs, youth-safety day camps, county fair or Farm Progress Days displays and activities, farm-rescue training for EMTs and fire fighters, and farm women's safety programs.

Youth Agricultural Safety and Health

Community-based efforts target youth and their families through a variety of programs. Safety activities in the form of day camps and school programs develop youth life skills related to safety and health, and provide a fun time in the process. In 1995-96, 16 counties held day camps or school programs reaching more than 8,000 youth. Other examples of youth safety programs include "Risky Business," where teenagers assessed their attitudes toward risky situations and how attitudes affect their decisions; and safety programs sponsored by hospitals, local agribusinesses and farm organizations, which allow people to work together to promote agricultural safety and health in their communities. In addition, BSE faculty and staff promote youth safety through their extensive involvement in 4-H mechanical sciences and FFA farm mechanics programs.

Agricultural Safety Management

Prevention of farm-related injuries and illnesses must be an integral part of farm management, not just an add-on activity. This program promotes the application of safety management techniques, such as designating one individual to take managerial responsibility for the safety and health of farm employees and family members. A women's video with discussion leader's guide was developed to empower women to become more proactive in making their farms safer. A presentation and written materials were developed for a four-state dairy farm personnel management conference, and a unit dealing with farm safety and health management is being prepared as part of a UWEX human-resources management program for farms.

Farm Machinery/Systems Safety

Tractors and other machines continue to be leading causes of farm-related death and serious injury. This program promotes hazard control on farm machines as well as safe operation. A tractor overturn exhibit has been displayed at Farm Progress Days, the largest farm-related technology show in Wisconsin and one of the largest in the nation. Publications on manure-handling safety and skid-steer loader safety have been developed.

Farm Rescue Training

A 2.5-hour, stand-alone basic training program has been developed to familiarize rescue and emergency medical personnel with the farm environment, farm hazards, common farm injuries and injury-causing incidents, and extrication techniques. Hazards to rescuers, preplanning, and continuing education and training are emphasized. More than 2,500 people have received such training in the last three years. Additional presentations to medical personnel about farm injuries in general have also been made. Cooperators for programming have included the UW School of Medicine Continuing

Medical Education, the Wisconsin Chapter of the American Trauma Society, and Flight for Life.

AgrAbility of Wisconsin

AgrAbility of Wisconsin is a partnership program between UWEX and the Easter Seal Society of Society of Wisconsin. It is part of the national AgrAbility program, funded by the U.S. Department of Agriculture, providing education and technical support to farmers, farm workers, and farm family members with disabilities. Since 1991, AgrAbility of Wisconsin has served more than 400 clients. Peer counseling has been established through Independent Living Centers in two areas of the state. A quarterly newsletter is published and distributed to county Extension offices, rural hospitals, Department of Vocational Rehabilitation (DVR) offices, and current and former clients. A Kraft Dairy Trust Fund grant allows limited funding of low-cost assistive devices; AgrAbility assists clients in obtaining DVR funding.

AgrAbility can provide the following services:

- consultation on equipment and worksite modifications
- farm job restructuring and/or alternative job development
- farm-safety advice and secondary injury prevention
- support group involvement
- stress management techniques
- community services and health care coordination
- identification of funding resources

Current and Recent Research

Linking Profitability with Improved Safety and Health

This project examines practices and technologies that will link profitability with improved farm safety and health. Two distinct types of operations have been targeted in this research — dairy farms and small fresh-market vegetable growers.

In the dairy study, field research identified three practices that reduce hazard exposure and increase profitability:

1. Storing forage in disposable plastic silage bags rather than in upright (tower) silos or bunker silos (silage piled up and packed in an open structure with walls) to reduce hazards due to falls, silo gas, and machine-related incidents. The bags also reduce storage losses.
2. Improving the location and arrangement of calf-care facilities, to improve the ergonomics of material handling and reduce labor costs.
3. Long-day lighting in barns, to increase heifer growth and milk production by the cows as well as reduce the likelihood of slips and falls caused by poor visibility.

The vegetable-grower study looks at hazards relating to the ergonomics of planting, harvest and material handling. Much of the work done on these operations is hand-work, involving stooping, lifting, and carrying, so relatively inexpensive solutions to these problems are being examined.

Human Presence Sensing on Farm Machines

This project is investigating the feasibility of using infra-red and microwave sensors on mobile farm equipment to detect human presence in hazardous areas and then shut off the machine. This type of sensing poses numerous challenges, a primary one being the elimination of false alarms that would cause an operator to disable or bypass the system. Variations due to temperature, moisture, presence of plants and animals, shock due to rough terrain, and other factors must be accommodated. A second major challenge is taking action based upon the signal generated by the sensors. The machine, its intake mechanism or other hazardous parts must be stopped very quickly to eliminate the chance of a person becoming pulled in or entangled.

Survey on Machinery Hazards and Retrofitting

It's easier to change machines than to change human behavior, which is why retrofitting farm machinery is an effective way to prevent injuries. An example would be retrofitting Rollover Protective Structures (ROPS) on tractors to prevent rollover (overturn) fatalities, instead of depending solely on operator caution. This survey looks at farmers' opinions about tractor rollovers and retrofitting, and wearing the seat belt needed to keep an operator inside the ROPS zone of protection. It also looks at another hazardous practice, that of taking extra riders on tractors, to find out the prevalence of the practice and operators' opinions about possible manufacturer-provided extra-rider seats.

Roadway Collisions Involving Farm Machines and Farm Trucks

On the road, slow-moving tractors and other farm machines pose risks to both machinery operators and other drivers. This project examines the circumstances surrounding roadway collisions involving farm tractors, self-propelled farm implements, and farm trucks.

Annual Farm Fatality Reports

Each summer the UW Center for Agricultural Safety and Health issues a report summarizing farm-related fatalities occurring in Wisconsin the previous year. A statewide newspaper clipping service provides clippings of farm-related fatalities. These clippings are examined to be sure they represent incidents related to farm work or the farm work site; recreational or home-related fatalities occurring

Continued on next page

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on farms are excluded. In addition, the Vital Statistics Section of the state Center for Health Statistics keeps a file of death certificates for deaths appearing to be farm-related; these certificates are compared and reconciled with the list kept by the UW Center. From the final list a report is developed.

Agricultural Health Promotion
This project involved surveying county Extension agents, vocational agriculture instructors, public health nurses, dairy farmers, and pesticide applicators to determine their level of participation in agricultural safety and health activities and their needs for agricultural safety and health resources. Researchers also worked with coroners and medical examiners to obtain detailed information about farm fatalities. As a result of this project, various printed and display materials were developed, a rural health and safety resource directory was assembled, needs were identified within the tractor and machinery operation certification program, and information was provided to the state legislative study committee that ultimately developed Wisconsin Act 455.

For more information, contact the following individuals at UW-Madison:

General agricultural safety and health, machinery and management programs, farm rescue:
Mark Purschwitz, PhD, Associate Professor and Director, University of Wisconsin Center for Agricultural Safety and Health, Dept. of Biological Systems Engineering, (608) 262-1180, mapursch@facstaff.wisc.edu

Youth safety and health:
Cheryl Skjolaas, Youth Agricultural Safety Outreach Specialist, Dept. of Biological Systems Engineering, (608) 262-9336, skjolaas@facstaff.wisc.edu

AgrAbility of Wisconsin:
Amy Bazile, Outreach Specialist, Dept. of Biological Systems Engineering, (608) 262-9336, adoyle@facstaff.wisc.edu

Research on profitability and ergonomics for dairy farmers or small vegetable growers:
Larry Chapman, Ph.D., Senior Scientist, Dept. of Biological Systems Engineering, (608) 262-7408, ljchapma@facstaff.wisc.edu

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Research on human presence sensing:
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Pesticide Applicator Training Program:
Roger Flashinski, Outreach Specialist, Dept. of Agronomy, (608) 263-6358, raflashi@facstaff.wisc.edu

Chris Boerboom, Professor and pesticide coordinator, Dept. of Agronomy, (608) 262-1392, boerboom@facstaff.wisc.edu

The PAT website is at http://ipcm.wisc.edu/

The Pesticide Applicator Training Program in Wisconsin
Pesticide use became widespread in Wisconsin after World War II. UW-Extension entomologist Ellsworth Fisher initiated the Wisconsin Pest Control Conference with Industry in 1946. The annual conference updated dealers, producers and applicators with the pest outlook and pest-control information for the growing season. Pesticide applicators were pretty much on their own in the 1940s and 1950s; there were no formal training programs in the state.

In the 1960s Fisher became the state pesticide coordinator. He helped to develop the Pest Management Education Program, which sponsored dealer meetings and sprayer schools throughout the state. Participation was voluntary.

In the 1970s, amendments to the Federal Insecticide, Fungicide and Rodenticide Act required the Environmental Protection Agency to register and classify pesticides. Under the amended act, applicators using restricted-use pesticides must first become certified. The first training sessions in Wisconsin were held in 1976.

Pesticide applicators receive their certification through the Wisconsin Department of Agriculture, Trade and Consumer Protection, which grades exams, issues certifications and licenses, and handles enforcement. UW-Extension does

the training through the Pesticide Applicator Training (PAT) program.

Most private applicators are crop and livestock farmers, fruit growers, sod producers, nursery and greenhouse owners, woodland and tree-farm owners, or foresters. Private applicators get their training materials from their county Extension office, and return to the office for a one-day training session taught by the county extension agent.

Commercial applicators go through the PAT office at UW-Madison to receive their training materials. The trainers are specialists from UW-Extension, the Wisconsin Department of Natural Resources, and other agencies who use or study pesticides.

The training curriculum for all applicators covers:

- **Labels and labeling comprehension.** Applicators learn that the label is the first source of information about a pesticide. They discuss a typical label and the information it contains.
- **Safety.** This includes handling, mixing, loading, and application; re-entry into treated fields; posting of treated fields; spill control and containment; use and care of protective clothing and equipment; personal safety and hygiene; and how to minimize exposure for applicators and other farm workers. Applicators learn about poisoning effects and symptoms, first aid for pesticide poisoning, acute and chronic health effects, and medical supervision for applicators.
- **Environmental considerations.** This section covers effects on air, soil, water, plants, beneficial insects and wildlife. Applicants learn about pesticide persistence, accumulation and degradation; alternatives to pesticides, drift to non-target sites, and non-point source pollution.
- **Pests,** including identification and habits of weeds, insects, plant diseases, etc; economic threshold levels, choice of control methods, application timing, and pesticide resistance.
- **Pesticides,** including classification, selection, chemistry and mode of action; types of formulations, pesticide compatibility, and when to use or not use additives and adjuvants.
- **Application equipment and calibration.** This familiarizes applicators with hand, ground and aerial sprayers, and covers sprayer maintenance, cleaning and storage. Applicators learn how to calibrate equipment to ensure that the correct amount of pesticide is applied uniformly to the target pest.
- **Pesticide mixing calculations and application techniques.**
- **Pesticide transportation, storage, decontamination and disposal.** Applicators learn proper decontamination techniques and disposal alternatives for empty containers and unwanted portions of pesticides.
- **Laws, regulations, legal issues and record-keeping,** including state and federal laws, right-to-know laws, and insurance and liability. Applicators learn of changes in laws and review the roles of state and federal agencies that regulate pesticides.

PAT training for commercial applicators covers 15 pest-control categories, and applicators can choose additional training in three subcategories: aerial application, agricultural and soil fumigation, and chemigation (applying pesticides through irrigation systems). Each category and subcategory has a specific training manual, written for Wisconsin conditions.

More than 35,000 pesticide applicators are currently certified in Wisconsin — 24,470 private applicators and 10,666 commercial applicators. County extension staff conducted about 150 private applicator training sessions in fiscal year 1996.

Nearly 9,400 applicators were certified or recertified last year. Proposed changes in pesticide-use regulations may require more people to get certified in the future.❖

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Non-Profit Directors and Officers Coverage	NO	YES
Scheduled Property Covered as Valued	NO	YES
Total Loss Cash Settlement Option	NO	YES
Water Back-Up Coverage	NO	YES
Mortgage Renegotiation Coverage	NO	YES
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Cancer Screening and Prevention in Rural Wisconsin: The Greater Marshfield Experience

Douglas J. Reding, MD, FACP; Karen A. Lappe, BSN; Mary Krueger, RN, MS; Bobbie Lee Kolehouse, MA; Debra Steneil, RN; and Richard A. Leer, MD, Marshfield

Abstract

Background: Providing medical services to rural residents results in unique challenges to providers and patients. Cancer screening (CS) and early detection services (EDS) are frequently underutilized with rural residents often presenting with advanced cancer at diagnosis. A comprehensive approach to determine barriers and overcome them constitutes "The Greater Marshfield Experience."

Methods: Focus groups with rural residents determined the greatest barriers to receipt of CS and EDS were distance, cost, time from work and self-reliant behavior. Directives to address these concerns were to keep information simple and provide services at the workplace. In response, Marshfield Clinic and its research division developed a collaborative research partnership with public health agencies (PHA), federally funded government programs and volunteer agencies.

Results: In-house activities to remove barriers for providing CS and EDS included the development of a separate screening unit for these activities. Reminder systems were employed to notify patients of the need and availability of preventative services. Co-payments for health screening services were eliminated from the clinic owned health plan. Area residents near poverty level were encouraged to enroll in federally subsidized health plans that promoted and paid for CS and EDS. Federally funded cancer screening studies were implemented that funded breast and cervical cancer screening and evaluated the benefits of screening for prostate, lung, colorectal and ovarian cancers (PLCO). Outreach activities included developing partnerships with local PHA and minority groups and providing mobile screening services to remote areas.

Conclusion: Concentrated, collaborative efforts to develop in-house systems and outreach activities resulted in delivery of CS and EDS in remote areas.

Key Words: cancer screening, rural programs, collaborative partnerships

Introduction

The delivery of health care to rural and underserved populations presents a challenge to health care providers. Traditional methods offering health education and medical services require the use of novel approaches to geographically reach these individuals. Rural and underserved populations are less likely to use medical services to the same degree as their urban counterparts and present with later stage disease at the time of the initial diagnosis.[1]

In August 1990, the Marshfield Medical Research and Education Foundation (MMREF) and Marshfield Clinic (MC) were awarded a cooperative agreement

Table 1. Health Screening Unit Exams by Mid-Level Providers

	Years	
	1994 (6 months)	1995 (12 months)
PLCO	352	1590
Non-PLCO	337	1612
Total	689	3202

Authors are associated with the Marshfield Clinic/Marshfield Medical Research and Education Foundation.
Grant support from NIOSH (UO3/CCU506135-02), NCI (CA57014), and DOH(156-021)

from the National Institute for Occupational Safety and Health (NIOSH) to evaluate barriers rural and farm residents perceive as obstacles to the receipt of cancer screening services. Informal surveys with rural residents identified the following barriers: 1) cost of cancer screening services, 2) time from work, 3) distance to providers, 4) lack of knowledge about the benefits of cancer screening services, and 5) self reliant behaviors.[2] Focus groups with farm families identified effective strategies to overcome these perceived barriers. Three simple directives were given to the staff: 1) keep the information simple and culturally relevant, 2) educate their children about the benefits of cancer prevention, and 3) go to their work place.[3]

With cancer screening and early detection, a priority for the Center for Disease Control (CDC), the National Cancer Institute (NCI) and the American Cancer Society (ACS), a unique opportunity existed to collaborate with national organizations to reach underserved rural and minority populations and meet the public health objectives outlined in Healthy People 2000.[4]

In an attempt to improve recruitment of African-Americans into cancer screening programs, various approaches have been evaluated. The studies recommend use of community health strategies such as: involving the targeted community in planning, taking the message to the target population, and educating the target population as to why prevention and early detection are important.[5] Successful projects include a community health approach for designing and implementing strategies for cancer prevention activities. Ownership of the cancer prevention project by the targeted community is crucial to the success of the project.

A collaborative community project, jointly sponsored by the Washington State Division of the American Cancer Society and Northwest Regional Primary Care Association, utilized community health centers to target women at or below 200% of poverty who had never utilized cancer screening service (Federal poverty level is $7,890 for single person). The majority of the women were 50 years of age or older, and approximately one third had completed 8 years or less of schooling. The participants described their impressions of factors which either facilitated or hindered their ability to obtain cancer screening.[6] Two factors influencing the receipt of care were the availability of medical services in geographic proximity to the individual's home and presence in a health provider system.

Office-based cancer screening reminder systems have been evaluated to determine the usefulness of computer generated letters notifying women of cancer screening examinations. The success of an of fice-based reminder system was demonstrated in women who had a regular system of care and available financial resources to pay for care.[7]

Continued on next page

Table 2. Description of the Study Population: Women in a Low-Income Managed Care Program

	Intervention Group (n=337), %	Control Group (n=322), %	p value
Screening test needed*			
Pap test	19	24	
Mammogram	31	26	
Pap test and mammogram	51	50	.08
Age, y*			
40-49	28	26	
50-64	46	47	
65+	26	27	.86
Race: non-Hispanic White*	100	100	
Responded to follow-up survey**	85	89	.48
Education**			
Less than high school	41	33	
High school graduate	38	41	
More than high school	21	26	.11
Self-reported history of mammography prior to study period**	65	72	.07
Doctor said Pap tests are no longer needed**	15	14	.62
No doctor/doctor >48 km(30 miles) away**	17	21	.12
Does not drive self to doctor**	23	25	.48
Must take time off work to go to doctor**	33	31	.55

* From medical claims database.
**From mailed survey of study subjects.

Continued from preceding page

Mobile cancer screening services have been available for some time. A mobile breast cancer screening project was developed in a predominately rural area. The inclusion of mobile mammography services improved cancer detection rates by 30%.[8] This model has been instructive for further initiatives.

Marshfield Clinic, a multi-specialty tertiary care center, and major health care provider in North Central Wisconsin, used a number of approachs to respond to identified barriers in reaching underserved rural and minority populations.

Methods

In-house Activities Health Screening Unit

In an effort to meet changing trends in health care, MC established the Health Screening Unit (HSU) staffed by a general internist and non-physician providers. The screening unit is located in an area of the clinic separate from routine clinical care in order to emphasize health promotion and preventive services. Nurse practitioners currently perform routine health maintenance examinations, preanesthesia medical evaluations, industrial examinations for preemployment, and cancer screening examinations for a national trial (The Prostate, Lung, Colorectal, and Ovarian Cancer Screening Trial). A large component of this service includes education about chronic disease, health maintenance behaviors, and dietary recommendations for risk reduction. It is anticipated that the health screening unit will assume a greater role in the provision of maintenance health care for routine screening services.

Patient Reminder System for Low-Income Women

To improve compliance with recommended health screening examination guidelines for breast and cervical cancer, MMREF evaluated the impact of a reminder letter on women enrolled in a low-income managed care program. The study was conducted within a population served by a federally funded community health center providing insurance-like benefits for individuals with incomes below 200% of the federal poverty level. Enrollees pay a pro-rated monthly premium (based on family size and income) for which they receive primary and specialty care from providers of their choice at more than 80 clinics sites in an 11-county area of Wisconsin. Screening mammograms and Papanicolaou (Pap) tests are covered benefits.[9]

A control/intervention design was employed in this project. Patients were randomly assigned to groups based on the penultimate digit of their medical history number. Age eligible women who had not received a mammogram in 2 years or a Pap smear in 3 years were sent reminder letters from their primary physician encouraging them to schedule an appointment. A second reminder was offered by a follow-up telephone call from a health educator to the intervention participants. The caller provided education about cancer screening benefits and assistance, if needed, in scheduling an appointment.

Flu Clinic

MMREF conducted a study to evaluate an intervention to promote breast and cervical cancer screening during its influenza clinic held at its facilities. Women were asked to complete a health survey. The survey included questions about their utilization of breast and cervical cancer screening. A control/intervention design was utilized with selection of participants for each group by day of attendance at the flu clinic. Randomization occurred over 6 days at two clinical sites with 1,076 women eligible for the study. Age appropriate women who reported not having a mammogram in the past year or Pap smear within the last 3 years were eligible for the study. Intervention participants were provided counseling at the flu clinic and received a followup telephone call. The women were also provided the opportunity to schedule an appointment for a Pap smear or mammogram on that day.

Outreach activities

SHP Reminder System

Security Health Plan (SHP), which is a wholly-owned Health Maintenance Organization (HMO) of MC, provides cancer screening services (for which accepted guidelines exist) as a benefit of the health plan. SHP mailed a reminder letter to female participants who had not received a Pap smear within the last three years (age 21-79) or a mammogram in the last 2 years (age 40-79). The rate of response to the reminder letters was compared to standards established by the Health Plan Employer Data and Information Set (HEDIS 2.5), the performance measurement system for health plans developed by the National Committee for Quality Assurance. (NCQA). Compliance with six month follow-up was reviewed from claims data and charts. Non-compliance criteria included age appropriate women who had not received a mammogram in 2 years or a Pap smear in 3 years.

Mobile Cancer Screening Services

MC's informal survey of rural Wisconsin residents noted distance from providers and cost as significant barriers to receipt of cancer screening services. In an attempt to overcome the cost barrier, MMREF/MC in cooperation with the State of Wisconsin Department of Health (DOH) provided breast cancer screening services to eco-

nomically disadvantaged and underserved women over the age of 50 years who were not routinely receiving these services. Women age 50 and older were targeted with some stipulations for screening women over the age of 40. A portable mammography unit was secured through the Wisconsin DOH program funded by the Centers for Disease Control Women's Health Initiative. Portable mammography units are required to meet the same national standards as the stationary units. Collaborative partnerships were established with women's groups and rural providers to bring mammography services on site to existing medical facilities. Marshfield Clinic's 26 satellite facilities were employed in the initial development phase. To geographically expand the service to all rural and minority (Native Americans) women, considerable coordination through public health agencies, clinics, and Native American Tribal Health Centers was required.

Table 3. Results of Breast and Cervical Cancer Screening Intervention Low-Income Women[9]

Test(s) Needed	Received Needed Test(s) during Follow-Up Period: Intervention Group No. (%)	Control Group No. (%)	Odds Ratio (95% confidence level)
Pap test only	13 (21.7)	3 (3.8)	6.9 (1.9,25.6)
Mammogram only	56 (53.8)	17 (20.7)	4.5 (2.3, 8.6)
Pap test & mammogram	32 (18.5)	11 (6.8)	3.1 (1.4, 6.9)
Total	101 (30.0)	31 (9.6)	4.0 (2.6, 6.2)

Table 4. SHP Pap Smear Utilization

Age	Population	Pre-letter compliance	Post-letter compliance	p value
21-39	7888	79.6%	84.4%	<.001
40-64	8714	71.4%	76.3%	<.001
65-79	6862	45.6%	50.8%	<.001

Table 5. SHP Mammogram Utilization

Age	Population	Pre-letter compliance	Post-letter compliance	p value
40-64	8714	64.5%	73.5%	<.001
65-79	6862	67.1%	74.2%	<.001

Results

In-house Activities

Health Screening Unit

The health screening unit and the utilization of non-physician providers has been favorably received by the MC medical community and the participants. Over 90% of surveyed participants expressed a high level of satisfaction in the medical care received from the health screening unit. The number of encounters has increased over the last 20 months.(Table 1) The success of the health screening unit demonstrates a means to provide health maintenance care at a reduced cost to the patient and insurer.

Patient Reminder System for Low Income Women

The study included 1, 1 05 women who met the age criteria and currently were enrolled in the managed care program. Fifty nine percent (N=659) of the women were in need of one or more cancer screening tests. There was no significant difference (P<.05) between the intervention and control groups with regard to screening tests needed, age, or other background characteristics.(Table 2) The overall response rate to the follow-up survey mailed to women in need of cancer screening from both the intervention and control group was 87% (N=573), with no differences between the intervention and control groups. Sixteen percent of the intervention women had scheduled an appointment for follow-up care after reviewing the reminder letter but prior to the telephone call. Women in the intervention group were significantly more likely to receive all needed cancer screening tests within the study time period than control participants. (Table 3) Analysis of factors for women who did not receive screening suggested women were less likely to receive cancer screening services if they needed to take time off from work to go to the clinic.[9]

Flu Clinic

A six month interval was used for study evaluation. Age, perception of current health, number of chronic diseases, and percent receiving flu-shots the previous year were not statistically different between the control and intervention

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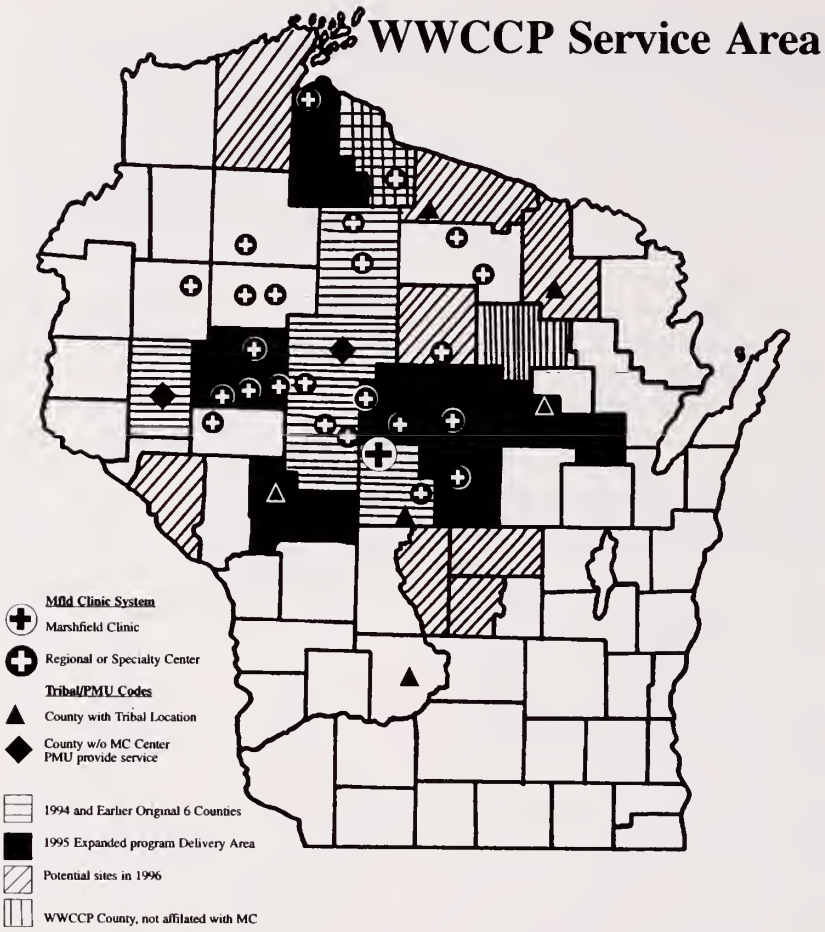

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group. There was no statistical difference in the distribution of needed cancer screening tests. This intervention at vaccination clinics did not result in increased cancer screening rates in the intervention group. Women who perceived their health as poor/fair and were age >70 had a higher ratio of subsequently utilizing cancer screening services but this higher ratio was not statistically significant. As a result of this intervention, efforts to reduce missed opportunities in the clinical setting and intervening with women not receiving flu shots are suggested.

Outreach Activities

SHP Reminder System

The SHP reminder letter resulted in a 5% increase in rates of Pap smear compliance over existing screening rates, which is statistically significant for all three age groups. HEDIS version 2.5 standards were utilized as the definition for compliance. The weakness of the HEDIS reporting system is that it does not take into account women who have had a hysterectomy. These women are counted as a part of the denominator. Three weaknesses were noted in the MC reporting system: 1) charges for Medicare age women may not be captured (laboratory charges are billed directly to Medicare), 2) SHP membership may not have been continuous for the 3 years, and 3) The screening results project did not track Pap smear utilization outside the MC system (Family Planning/Planned Parenthood Programs). Compliance rates per age group for cervical cancer screening are reported pre and post reminder letters.(Table 4) Pre-reminder letters resulted in 9% increase in mammograms for age 40-64, and 7.1 % for age 65-79. These changes are statistically significant for both age groups. Again, HEDIS 2.5 standards were used for the definition of compliance. Several factors may affect these results: 1) All charges for Medicare women may not be captured, 2) HEDIS does not exclude from the dominator women who have had a bilateral mastectomy, 3) Membership in SHP may not have been continuous for 2 years, and 4) SHP participants may have had mammograms at free screening or mobile units with outstanding charges pending. Compliance rates per age group for breast cancer screening are reported pre and post reminder letter. (Table 5)

Mobile Cancer Screening Activities

The outreach breast cancer screening project has grown both in numbers of screening mammograms performed, as well as in the geographic area covered. A dedicated staff is retained to develop relationships with the local community and medical providers to schedule examinations. Appointment reminder letters are sent to all participants. Letters with results of the mammogram are provided to both the patient and a primary provider. Rural communities have been receptive to the service, with requests initiated by businesses, civic groups and public health departments. The geographic coverage has expanded significantly. Illustration 1 shows the geographic expansion of the servicing of sites by county, and the location of Marshfield Clinic facilities. Expansion has occurred in both Marshfield Clinic facilities and non-Marshfield facilities. Native American women on Wisconsin reservations have participated considerably. Acceptance of the screening services required presenting the need for the screening services to tribal health professionals. Upon approval, the services has been provided to a largely underserved

women's population. The number of Native American women and the number of different tribes who utilize this service are increasing annually.

To provide a more comprehensive cancer screening service, the feasibility of utilizing a nurse provider to do clinical breast examination, Pap smears, and cancer prevention education on site with mammography screening is being explored. These activities represent an attempt to overcome distance from providers and other barriers to cancer screening.

Discussion

The projects described represent a continuum of activities initiated to address barriers identified by Central Wisconsin residents to receipt of cancer screening services. The activities include a multi-faceted approach.

Cost of care has been recognized as a major barrier to receipt of cancer screening services. Although the percentage of people working in Central Wisconsin is high, disposable income, in general, is low. Paying for cancer screening services falls on a list with many other financial needs for these residents. Education about the benefits of health maintenance and cancer screening is very important. Individuals must perceive the benefit of staying healthy directly affects their ability to remain in their home and the community.

While personal cost for care is an issue, direct and indirect cost for provision of that care remain a bigger issue. System efficiencies which could otherwise be incurred by worksite screenings at large industrial plants are not feasible in a rural area. Thus coordination and mobilization of services at strategic points of service becomes imperative. Federal grants and contracts were able to subsidize the cost of care for these rural residents and decrease the financial burden to providers for delivery of these services.

Research results at MMREF showed that even if medical services were a covered benefit, participants were not likely to utilize them if they needed to take a significant amount of time away from work to travel a distance. Marshfield Clinic and MMREF developed subsidized mobile capabilities for breast cancer screening to improve compliance rates in this isolated geographic area. Once captured into the mobile system, remainder letters and coordination of subsequent screenings have maintained compliance with cancer screening guidelines. This service is being expanded to include cervical cancer screening.

Reminder letters serve as a non-threatening tool to educate patients about the need and benefit for cancer screening. Office based systems can be computerized to ensure reminder letters fall within recommended guidelines for quality care. At least two projects of MC, one in a low income population and one in an HMO managed care population, suggest that reminder letters are very effective and significantly improved screening utilization and compliance. In the future, implementation of national care standards will place the burden of patient compliance as a measure of quality care on the provider in the managed care environment.

MC and MMREF are currently involved in a national cancer screening trial to prospectively evaluate various screening strategies for prostate, lung, colon and ovarian cancer. The results of this prospective trial will help establish future screening guidelines for these four cancer sites.

A multi-system approach is needed for the successful implementation of strategies for cancer screenings to reach the rural population. Geographic isolation requires utilization of numerous coordinated strategies to improve compliance, maintain or reduce cost, and to be in compliance with national quality care guidelines.

References

1. Saftlas A, Blair A, Cantor K, Hanrahan L, et al. Cancer and other causes of death among Wisconsin farmers. *Am JInd Med* 1987; 11:119-129.
2. Reding D, Anderson H, Lappe K, Hanrahan L, Haskins L. Public Health: The Wisconsin farmers' cancer control project. *Wis Med J* 1991; 90:443-445.
3. Reding D, Fischer V, Gunderson P, Lappe K. Skin cancer prevention: a peer education model. *Wis Med J* 1995;94(2):77-81.
4. United States Department of Health and Human Services. Healthy people 2000: National health promotion and disease prevention objectives. Washington (DC):US Government Printing Off~ce; 1990(DDS Publication No.(PHS)91-50212).
5. Paskett ED, DeGraffinreid CR, Tatum C. The recruitment of African-Americans in cancer prevention and control studies (Meeting abstract). *Proc Annu Meet Am Assoc Cancer Res* 1994; 35:665-6.
6. Norman AD. Factors related to the development of breast cancer screening programs for low-income older women. *Diss Abstr Int* 1990; 51(3):1005.
7. Porter K. Setting up a GP smear recall scheme. *Nurs Times* 1989; 85(1):35.
8. Haberman JD, Love TJ, Francis JE. Screening rural population for breast cancer using thermography and physical examination techniques: methods and results - a preliminary report. *Ann N YAcad Sci* 1980; 335;492-500.
9. Lantz, Stencil D, Lippert MA, Beversdorf S, Jaros L, Remington P. Breast and cervical cancer screening in a low-income managed care sample: The eff~ciency of physician letters and phone calls. *Am Jof Public Health* 1995; 85(6):834-836. ❖

Serum Potassium Levels in Caucasian and Hmong Patients in Wausau, WI, October, 1996

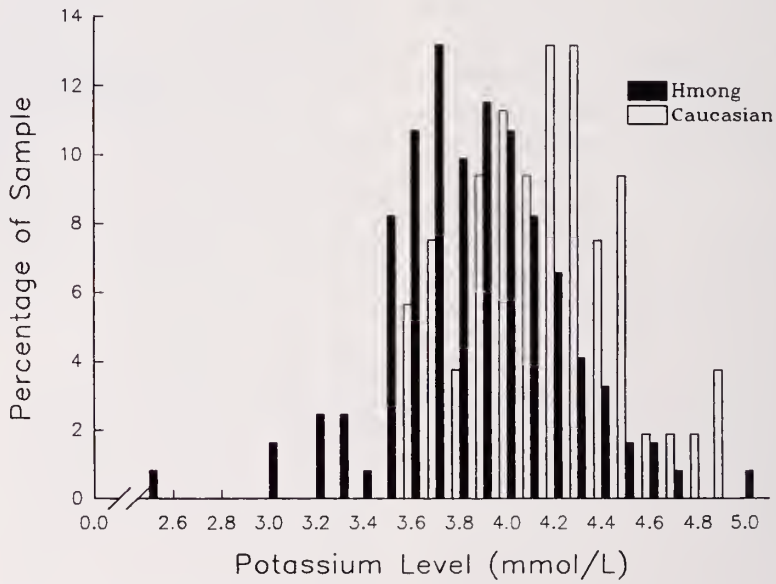
Eileen S. Gavin MD; Hilary Scully, MD; and Bryan Hendricks PhD, Wausau

Objective
To determine if there is a significant difference in serum potassium levels between the Southeast Asian population and the Caucasian population in Wausau, WI.

Introduction
Potassium is an electrolyte which is an important component in proper neuromuscular function. Only 2% of total body potassium is found extracellularly which can be measured by serum analysis. Serum potassium is tightly regulated by the kidneys and adrenal glands. The normal potassium values are generally determined by taking two standard deviations about the mean of any given population, approximately 3.5-5.0 meq/L for most laboratories in the US.[1] At Wausau Hospital several members of the hospital staff noted that a subgroup of the population, the Hmong from Southeast Asia, tended to have lower serum potassium levels than the Caucasian population without any obvious clinical reason. There have been no previous studies done on this particular population, but there have been studies done on the Chinese, of which the Hmong are descendants. Some studies have shown that Chinese males have lower serum potassium levels than males in other countries which is felt to be due to environmental rather than genetic factors.[2,3] Some studies indicate that climate may play a role in the differences in potassium levels.[5] Males from China who have lived in the US for .5 - 9 years have been found to have similar serum potassium to American males.[3] No significant difference was found between potassium levels of Americans living in China and the native Chinese.[4] The same study showed that there was no effect of age or gender on serum potassium levels.[4] The purpose of this study is to determine if there is a significant difference in potassium levels between the Hmong and Caucasian populations in Wausau, WI, and to determine if age or gender are factors.

Dr Gavin is a third year family practice resident at Wausau Family Practice Residency Program affiliated through the University of Wisconsin. Dr Scully is with the family practice faculty at Wausau Family Practice, Wausau. Mr Hendricks is Professor of Psychology at the University of Wisconsin Marathon County. Reprint requests to: Eileen S. Gavin, MD, Wausau Family Practice Center, 995 Campus Drive, Wausau, WI 54401-1898.

Distribution of Potassium Levels in Caucasian & Hmong Samples



Methods
The method used for obtaining the data was a retrospective chart review. The majority of the Hmong potassium levels were drawn from chemistry panels for the new immigrant physical exams which are required after arrival in the U.S. (n=120, male=69, female=51, age 1-83). These included men, women and children who were tested at Wausau Family Practice Center. Potassium levels for Caucasian men were collected from employment physical exams for hazardous material handlers and were also drawn at Wausau Family Practice Center (n=30, male=30, age 25-57). Data for female adults and children were obtained from Wingra Family Medical Center in Madison, WI (n=23, female=15, male=8, age=0-58). All charts were reviewed for any medical condition or medication which could potentially alter the serum potassium levels and those patients were excluded from the study. Such medical conditions included diar-

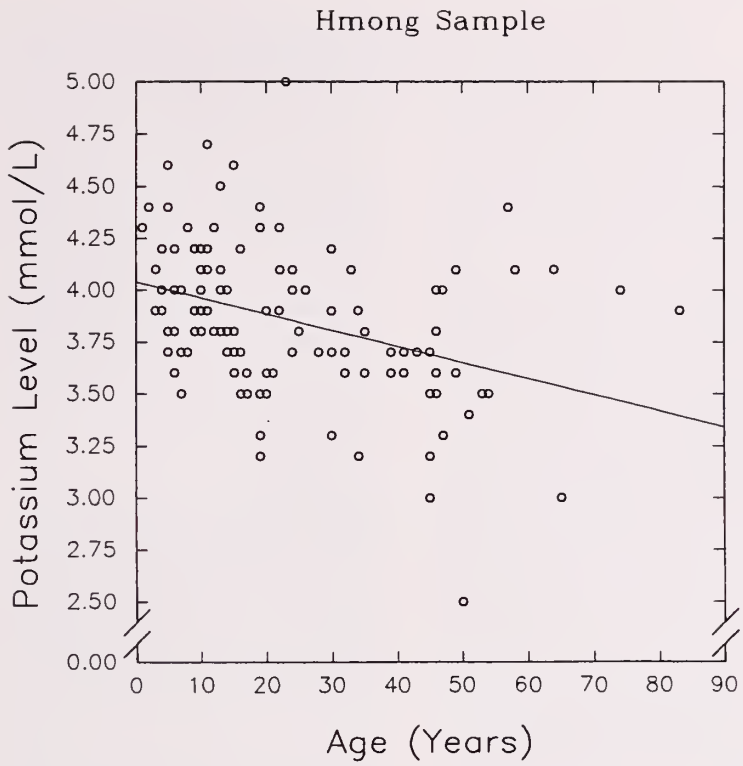
rhea, dehydration and diabetes mellitus. Medications which resulted in exclusion were diuretics, Angiotensin Converting Enzyme inhibitors and insulin.

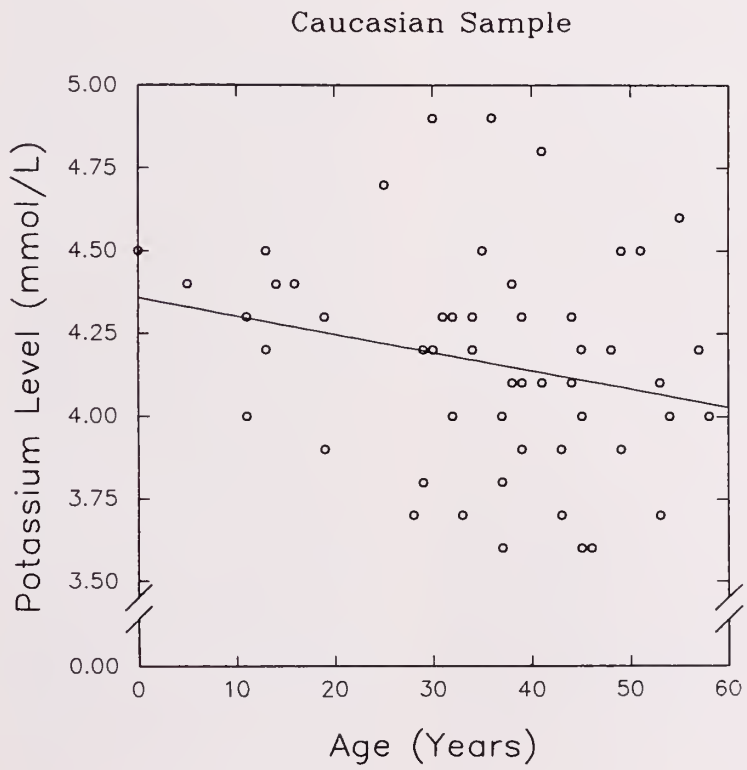
Results

The distribution of potassium levels of both the Hmong and Caucasian samples is shown in Figure 1. It is evident that there is considerable overlap between the distributions, but the respective distributions also clearly peak at different points. The mean for the Caucasian sample was 4.16 meq/L (s = .325) and for the Hmong sample 3.85 meq/L (s = .368).

The potential influence of age was explored first. The Hmong sample was significantly younger than the Caucasian sample [t (125) = 4.41, $p < .001$]. For the Hmong there was a significant correlation between age and potassium levels [r (119) = -.374, $p < .001$], with potassium levels declining with age. For the Caucasians, however, the correlation was not significantly different from zero [r (51) = -.235, n.s.]. Scatter plots of these relationships are portrayed in Figures 2 and 3.

These results suggested that age might be a contaminant in subsequent analyses. Therefore, a two-way Analysis of Covariance (ANCOVA) was conducted with age as the covariate and gender and ethnicity as the independent variables and potassium levels as the dependant variable. This analysis partialled out or controlled for the potential influence of age. There was a significant main effect for ethnicity [F (1,168) = 35.21, $p < .001$] with a Caucasian age-adjusted mean of 4.22 meq/L and a Hmong age-adjusted mean of 3.83 meq/L. There were not significant gender differences [F (1,168) = 0.74, n.s.], nor was the interaction between ethnicity and gender significant [F (1,168) = 0.96, n.s.].





Conclusion

The results of this study indicate that the Hmong in our community have lower average serum potassium levels than those in the Caucasian community. If the "normal" range of potassium levels was based on the Caucasian sample (+/- 2 standard deviations), the resulting range would be from 3.51 meq/

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L to 4.81 meq/L. Using these limits, over 16% of the Hmong sample would be classified as having subnormal potassium levels. Using the Hmong data for establishing norms would suggest a span from 3.11 meq/L to 4.59 meq/L, with only 2% deficient. Important clinical questions can be raised. Are separate norms needed for Hmong and Caucasian samples? Do these individuals require potassium replacement or additional follow-up? Should any work-up be done? Should we be using our limited resources to correct mildly "subnormal" potassium levels in this population? Certainly more studies with a larger sample size need to be made before these questions can be adequately addressed.

Part of the reason for such a large difference in potassium values may have to do with the fact that the vast majority of the Hmong data came from new immigrants as opposed to those that have been in the US for some time. It may be that their potassium values increase after they have been in the US for some time as has been shown in other studies.[3] If this were to be the case, than this would indicate environmental factors such as climate or diet as opposed to a genetic etiology, which has been suggested by other authors.[2,3,5]

It is interesting that potassium values are correlated with age in the Hmong, but not the Caucasian population. Several factors need to be considered here. First, the age distribution is quite different, with fewer Caucasian children than Hmong children. There may also be differences in diet, if the younger generation eats more traditional American food. In addition, many of the Caucasian females and children came from a city other than Wausau, with the potential for other influential variables. Future research could benefit from the use of a prospective analysis with age and sex matched controls which would pay particular attention to diet and duration of residence in the US.

Acknowledgements

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References

1. O'Kell, RT and Elliot, JR: Serum potassium values in adults. *Amer J of Med Tech*, 40: 120-124, 1974.
2. Reidenberg, MM, et al. : Differences in Serum Potassium Concentrations in normal men in different geographic locations. *Clinical Chemistry*, 39:72-75, 1993.
3. Reidenberg, MM, Gu, Z-P, Segal, S: Serum potassium: Values in normal men in Shanghai vs. those in men from Shanghai living abroad. *Clinical Chemistry*, 40:340, 1994.
4. Chao, T-J: Comparison of serum sodium and potassium by direct ion-selective electrode analysis between Chinese and American people. *Proc Nat Sci Counc*, 11: 97-99, 1987.
5. Henrotte, JG: Variation of plasma potassium and potassium tolerance in man in relation to climatic adaptation. Federation Proceedings Symposium on Temperature and Altitude, 25:1375-1379, 1966. ❖

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*What's New in Microbiology...*Emerging Infections

L. William Cashdollar, PhD; Jerry L. Taylor, PhD; and Sidney E. Grossberg, MD, Milwaukee

SINCE THE DISCOVERY of penicillin by Fleming, we have moved through a 50-year bubble of history during which the bacterial scourges of man and animals have been largely controlled, or at least become treatable. The progressive increase in antibiotic-resistant microbes marks our potential exit from that bubble.

With the elimination of smallpox in 1977 and the introduction of vaccines for poliomyelitis, measles, mumps, and rubella, it was also thought that viral diseases in the US would be controlled by immunization. The folly of this idea is pointed up by the current epidemic of AIDS, now the leading cause of death in the US for people between the ages of 25 and 44, but AIDS is only one of many diseases caused by infectious agents that have been emerging in recent years. In addition, some diseases that were thought to have been controlled or eliminated have begun to reappear.

This emergence of infectious diseases is of concern, expressed even in the lay literature and media. The Centers for Disease Control (CDC) has broadly defined an emerging disease as "a disease of infectious origin with an incidence that has increased within the past two decades, or threatens to increase in the near future." This definition sets emerging diseases apart from the newly-identified agents that are responsible for, or associated with, previously well-recognized diseases, for example, the association of *Helicobacter pylori* with upper gastrointestinal ulcers, human herpesvirus (HHV) type 6 with roseola or lethal pneumonia in the immunodeficient, HHV type 8 with Kaposi's sarcoma, and the multiple new virses that cause hepatitis (hepatitis viruses C, F, and G).

We discuss here some specific examples of the infectious diseases that are emerging, or that have the potential to emerge, and cause significant impact on the US population. We also discuss what is thought to be the basis for their emergence and/or reappearance. For most emerging or re-emerging infectious diseases the factors responsible for their emergence may be grouped into five categories: 1) ecological changes including changes in human demographics, 2) changes in human behavior, 3) speed and frequency of international travel, 4) industrial and technological advances, and 5) microbial evolution.

Cashdollar is with the Department of Microbiology, Taylor is with the Departments of Microbiology and Ophthalmology and Grossberg is with the Departments of Microbiology and Medicine all at the Medical College of Wisconsin, Milwaukee. Reprint requests to: L. William Cashdollar, PhD, Department of Microbiology, Medical College of Wisconsin, 8701 Watertown Plank Road, Milwaukee, WI 53226; phone 414-456-8751; Fax 414-456-6535.

Changes in Ecology and Human Demographics

Changing ecological systems contribute to the emergence of infectious disease by placing people in contact with the natural animal reservoir or vector of a pathogen. Demographic changes in the world's population, including migration of workers from rural to urban settings, facilitate the introduction and transmission of new pathogens in population centers. Common examples are seen with insect- or rodent-borne pathogens, illustrated by the recent outbreaks of hantavirus pulmonary syndrome and dengue fever, discussed below, as well as other viral hemorrhagic fevers throughout the world.

Hantavirus Pulmonary Syndrome

In 1993 an apparently new disease, acute adult respiratory distress syndrome with high mortality, was linked to a hantavirus, so called because it is genetically similar to the Hantaan virus that causes Korean hemorrhagic fever, which presents clinically primarily as a renal syndrome. These RNA viruses are maintained in nature by rodents and disseminated in their urine and feces. Unusually large amounts of rain in the southwestern US led to an abundance of food sources for rodents, resulting in a burgeoning of the rodent population thus increasing the likelihood of man-vector contacts. Cases of hantavirus pulmonary syndrome have been recognized mostly west of the Mississippi and in Florida, New York, Minnesota, and Indiana, but not yet in Wisconsin. [*Editor's note*: The first treatment of a case of Hantavirus was discussed in the paper, *Hantavirus Pulmonary Syndrome in Wisconsin* published in the February 1997 issue of *WMJ*.] Hantavirus relatives are now found world-wide.

Dengue and Dengue Hemorrhagic Fever

Dengue virus, now endemic in much of the Carribean and northern South America, is spreading throughout South America as well as into the southern US. Transmitted by mosquitoes, dengue presents as a fever of sudden onset with painful arthralgias and rash. Four serotypes of this flavivirus exist, and when a previously-exposed individual becomes infected

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with a second serotype, a serious hemorrhagic fever can develop. Dengue hemorrhagic fever can be especially severe in children. The current theory is that antibodies developed during the first infection bind to the virus introduced upon subsequent infections, and the virus-antibody complex enhances virus replication in monocytic cells, followed by T-cell activation, cytokine release, and varied secondary effects. The geographic range of dengue is currently expanding because of the increased distribution of mosquito species that can serve as vector for the virus.

Cryptosporidiosis

Cryptosporidium parvum, a leading cause of persistent diarrhea in developing countries, is a highly infectious, very small, enteric protozoan that is resistant to chlorination, and difficult to remove from contaminated water by filtration. The organism contaminates untreated surface water, swimming and wading pools, day-care centers, and hospitals. It is ubiquitous in many animals, especially cattle. That fact and heavy March rainstorms contributed to contamination of the Milwaukee water supply, leading to the 1994 epidemic, the largest in history with over 400,000 people infected. The protozoan is also transmissible from person to person and is able to infect with as few as 30 oocytes, which enter brush-border epithelial cells of the small bowel, where they persist and divide just under the cell membrane. The illness it causes is characterized by watery diarrhea, abdominal cramps, and weight loss lasting longer than 1-2 weeks in previously-healthy persons or indefinitely in immunocompromised patients, with 50% mortality in the latter group. Although more rigorous standards of acceptable turbidity in drinking water have been introduced, new approaches to removing infectious oocytes from water supplies as well as more accurate means of diagnosis are needed.

Changes in Human Behavior

Sexually transmitted diseases like AIDS exemplify the effects of human behavior on disease transmission. Transmission of HIV as well as other viruses by the use of contaminated needles by intravenous drug abusers is another example of how human behavior can increase the spread of infectious agents. We have elected not to discuss AIDS in detail in this article due to the large volume of information available on what is surely the most significant emerging infectious disease in the US today.

Changes in International Travel

The increased volume and speed of world travel enhance the opportunity for infectious disease to spread to any part of the globe not only by infected people but also by contaminated foods and infected animals, such as rodents, invertebrates, or even monkeys. The African hemorrahagic fever caused by Ebola virus, discussed below, could be transmitted to the US population via international travel. Malaria, dengue fever and the recent outbreaks of plague in India and cholera in South America and southeast Asia also represent major threats.

Ebola Virus

Ebola virus belongs to the group of filoviruses, so-called because their single-stranded RNA is enveloped in a very long filament that buds from the cell's plasma membrane. It replicates in many sites, including vascular endothelium, liver, and brain. The blood and excreta of patients are highly infectious. Mortality can be as high as 80%. So far, the only means of control is quarantine. Though the reservoir is unknown, primates are suspected of maintaining the infection in nature.

Industrial and Technological Advances

Technological advances, including those in medicine, have resulted in the emergence of a number of organisms as etiological agents of disease. Many of these are opportunistic pathogens that cause disease in individuals who have impaired immune systems. When the number of patients receiving immunosuppressive therapy for organ transplant or for anti-cancer treatment is added to those that are immunocompromised by infection with HIV and those that are malnourished, for example the homeless population, organisms previously not commonly associated with clinical disease can become significant pathogens. Invasive fungal infections are a major problem in transplant recipients; the commonest causes are Candida and Aspergillus species.

Changes in the Infectious Agent

Microbial populations constantly and rapidly evolve by virtue of their short generation time, their high genetic variability, and selection by changes in their environment. Classic examples of such evolution are antibiotic-resistant bacteria that have been selected by the frequent and sometimes inappropriate use of antibiotics. Bacterial pathogens that are re-emerging include multi-drug resistant *Vibrio cholerae*, *Mycobacterium tuberculosis* and vancomycin-resistant enterococci. Many viruses can rapidly mutate giving rise to variants quickly. The effect of genetic variability on the emergence of disease is illustrated by influenza virus.

Influenza

Influenza has a high likelihood of re-emergence. Almost 30 years have elapsed since the Hong Kong influenza pandemic. The segmented nature of the influenza vi-

rus genome allows influenza virus strains to evolve rapidly through the process of RNA genome segment reassortment when different viruses coinfect the same host, for example, in China where the agricultural environment favors the interaction between known influenza viirus carriers, especially birds, domestic pigs, and man. Genetic reassortment between animal and human strains can result in the creation of novel and potentially dangerous viruses. Two viral proteins, the hemagglutinin and the neuraminidase, appear to be critical targets for development of protective immunity to influenza. Novel hemagglutinin and neuraminidase types resulting from genetic reassortment have been associated with the major influenza outbreaks in the twentieth century. Several hemagglutinin and neuraminidase types exist in animal influenza viruses that have not yet appeared as human pathogens, against which humankind will have little protective immunity.

Selected Reading

Emerging Infectious Diseases, A peer-reviewed journal published quarterly by the National Center for Infectious Diseases, Centers for Disease Control and Prevention (CDC).

Berkelman, RL; Pinner, RW/ and Hughes, JM. Addressing Emerging Microbial Threats in the United States. *JAMA* 1996;275:315-317.

Gore, A. Emerging infections threaten national and global security. *ASM News* 1996;62: 448-449.

LeDuc, JW. World Health Organization Strategy for Emerging Infectious Diseases. *JAMA* 1996;275:318-320.

Tenover, FC and Hughes, JM. The Challenges of Emerging Infectious Diseases. Development and Spread of Multiply-Resistant Bacterial Pathogens. *JAMA* 1991;275: 300-304. ❖

Conclusion

The factors responsible for the emergence or re-emergence of infectious disease pose special problems to physicians, public health officials, medical researchers, and governmental authorities. There is a need for increased awareness and continuing vigilance for unusual clinical presentations of illness and the need to report them quickly to local health officials and the CDC. ❖

Proceedings from the 1996 Wisconsin Primary Care Research Forum and Tenth Annual WReN Meeting

THE TENTH ANNUAL Meeting of the Wisconsin Research Network (WReN), the 1996 Wisconsin Primary Care Research Forum, was held October 25-26, 1996 in Wausau, Wisconsin. WReN, a statewide network of more than 600 primary care professionals interested in practice-based research, is organized under the auspices of the Wisconsin Academy of Family Physicians (WAFP) Research Committee and is supported by the WAFP and the Wisconsin Institute of Family Medicine (WIFM). This two-day conference is planned as a working meeting for the participants and includes presentations by invited speakers, original research by primary health care professionals and workshops related to conducting research in the office setting. The following abstracts represent presentations of original research. (From the Wisconsin Research Network. Contact: John Beasley, MD, WReN Director, 777 S. Mills St., Madison, WI 53715.)

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Handwashing Frequency and Factors that Influence it in a Family Practice Residency Clinic

Whyte BS, Corea ME, Brill JR, Baumgardner DJ (Milwaukee)

Purpose: Ignaz Semmelweis first linked handwashing prior to examining women in labor with favorable outcomes in 1847. Handwashing is now a mainstay in reducing the spread of nosocomial infections in all patient encounters. Our purpose was to evaluate compliance with this ideal in a family practice residency clinic and its relation to clinical setting, level of training of the provider, and direct observation by a medical student.

Methods: The handwashing habits of residents and staff were unknowingly directly observed by a medical student who was shadowing the physician during routine office visits in group 1. In study group 2, a nurse observed the sink in each exam room after each visit for evidence of use. The age, sex, and chief complaint (infectious vs. non-infectious) of the patient were recorded. The level of training of the provider was also noted.

Results: Data were collected from 140 observed patient visits and 82 non-observed visits. Handwashing frequency was 54% and 60% respectively, which was not statistically different (p=.37). Handwashing was more frequent when the patient was less than 6 years of age (74%) vs. greater than 6 years of age (53%, p=.048) In patients with an infectious disease complaint, handwashing occurred 63% of the time vs. 53% when the complaint was non-infectious. This was not a significantly higher rate (p=.17). There was no difference in handwashing frequency with level of training of the provider.

Conclusions: Previous studies in the area of handwashing reveal an average compliance rate of 40% in hospital settings. The 56% handwashing frequency in our clinic is higher than in most published studies but remains suboptimal. The higher frequency in pediatric patients and patients with infectious complaints seems intuitive. The lack of a variation with level of training of the provider suggests that handwashing behavior is set early on in medical education.

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The Effectiveness of the Triple Screen in a Family Practice Residency Setting

Stephens S, Brill J, Baumgardner D (Milwaukee)

Background: The Triple Screen (Maternal Serum Alpha Fetoprotein, Human Chorionic Gonadotropin, and unconjugated estriol) was developed to increase antenatal detection of chromosomal abnormalities over MSAFP screening without increasing the number of false-positives. The goal of this study was to evaluate the efficacy of the Triple Screen within a family practice residency program.

Methods: The medical records of all obstetric patients with estimated dates of confinement from January 1, 1992 to the present were examined. Data concerning the patients demographics, genetic risk factors, baseline labs, decisions to undergo genetic screening, and diagnostic tests resulting from positive screens, were obtained. Analysis of the data included the percent of patients undergoing genetic screen, the number of positive screens, cost analysis of the screens, and pregnancy outcomes.

Results: A total of 306 of the 488 patients (62.7%) underwent genetic screens. Four of 108 MSAFP screens were positive (3.8%), and 26 of 198 Triple Screens were positive (13.1%). All four of the positive MSAFP screens resulted in normal pregnancy outcomes, and 24 of the positive Triple Screens resulted in normal pregnancy outcomes. Six of the 9 women who had adverse pregnancy outcomes had undergone genetic screening: 1 had a negative MSAFP result and 3 of the 5 Triple Screens were negative. Theoretical cost analysis of the MSAFP screen including the cost of the screen itself and the diagnostic tests resulting from positive screens was $62,871. The total theoretical cost of the Triple Screen was $186,856.

Conclusion: The Triple Screen was not an effective method of antenatal screening for genetic defects in the residency program. Using the Triple Screen increased our false-positive rate by 3.5 times over using the MSAFP screen alone without increasing the detection rate of chromosomal abnormalities.

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Training, Knowledge and Performance of Blood Pressure Measurement in the Family Medicine Training Environment

Peramsetty R, Grim CE, Wong P (Kenosha)

High blood pressure is the most common chronic disease seen in family medicine. The treatment of high BP (HBP)

has been proven to decrease the risk of cardiovascular morbidity and mortality. Thus, the most important observation made at any medical visit is the blood pressure (BP). Unfortunately, BP is rarely taken according to the guidelines developed by the American Heart Association. Failure to diagnose HBP will result in preventable disabilities and deaths. Research in Canada has demonstrated that trainees in family medicine do not know or practice proper technique. Our own research suggests that this is because most professionals were never trained to mastery of this skill.

Purpose: The purpose of our research was to assess the current knowledge and practice of BP measurement in a family medicine training program.

Methods: **Training** and **Knowledge** of proper technique were determined with acriterion based, standardized written assessment in 16 physicians, 3 medical students and 11 nurses. **Practice** of proper technique was assessed by a standardized **technique** check form as 5 nurses were surreptitiously observed as they measured BP. **Observer bias** was assessed in 3 nurses by analysis of BPs recorded during 71 clinic visit record in 5 patients.

Results: Only 74% of trainees and practitioners had ever been formally trained in BP measurement. The average time spent in training was less than one hour. Only 35% of MDs had ever been listened to with a double stethoscope or tested objectively with videotaped BP examples. Although 67% owned their own aneroid BP device which had been purchased 8.7 years ago, only 31% had ever checked it against a mercury manometer. Only 3 or 30 persons (10%) passed the written assessment. The written score was inversely related to years since last trained or tested ($r=p<.006$). None of the nurses followed all of the AHA guidelines. Major errors were: not selecting the correct cuff size, not determining the maximum inflation level, deflating too fast and 100% took only one reading. Marked terminal digit bias for zero was present (50% of readings ended in zero, $p<.001$), and one nurse consistently measured diastolic BP higher by 4 mm Hg and another by -4 mm Hg lower than the average. Thus, if nurse one had measured the BP on one visit and nurse two on the next visit, the diastolic BP would be expected to differ by an average of 8 mm due to observer bias alone.

Conclusions: In a university based family medicine training program the knowledge and performance of blood pressure measurement by physicians and nurses was substandard. The data suggested that this was most likely due to inadequate initial training and lack of repeat assessment of skills and practice. The self-owned equipment has not been inspected according to recommended quality control guidelines and is likely inaccurate. The serious observer bias by nurses suggests that blood pressures taken in our setting are unreliable. As these errors have not been detected by the physicians, who are ultimately responsible for accurate measurement, efforts to improve both physician's and nurse's knowledge and skills in BP measurement would likely improve the quality of the critical measurements and improve the health of our patients.

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Qualitatives Studies of the Ecology of Blastomyces Dermatitidis

Baumgardner DJ (Milwaukee)

Purpose: Blastomycosis is a significant public health problem in Wisconsin. Close proximity to waterways and excavation are risk factors for this disease. The precise ecological niche of the etiologic dimorphic fungus, Blastomyces dermatitidis, is unknown, but presumably includes organic material, mild acidity, and perhaps excrements. Qualitative studies may help define this niche.

Methods: (1). During epidemiologic investigations of North Central Wisconsin human and canine blastomycosis cases, 1989-96, 51 patients or dog owners who were interviewed by the author and received homesite visits offered their speculation regarding the circumstances of exposure. These cases were diagnosed between 1977 and 1995. The open-ended remarks were categorized and tabulated. (2). Based on these data, qualitative growth studies of a canine isolate of B. dermatitidis on a variety of postulated substrates was undertaken, using standard agar plate techniques.

Results: 1. Five subjects offered two postulated modes of exposure, the remainder one. Some were two-part responses such as "digging up rotted stumps", to total 63 separate items. Thirty-five (56%) of response items involved general mode of exposure: excavation (13 items), digging/soil disruption (14), and general outdoor activities such as fishing, wading or walking (8). Specific materials were implicated by 27 items (44%), and all involved decomposing organic material in the form of rotted wood/bark (13) or other plant materials (7), beaver structures (5), or feces (3). 2. B. dermatitidis can use a variety of natural water-soluble waste products as chief nitrogen source, including allantoin (urine of most mammals and true flies), creatinine (urine, avian droppings, grain seeds, vegetable matter) and guanidoacetic acid (precursor of creatinine). Glycerol (decomposed fat) may be used as sole carbon source. An allantoin-glycerol medium affords good growth of yeast-phase B. dermatitidis at room temperature.

Conclusions: Qualitative data support the importance of decaying organic materials in the microecology of B. dermatitidis. Perhaps under certain conditions, B. dermatitidis may exist in the environment in the yeast phase, contrary to current belief. Further studies are suggested.

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An All-residency Research Project: Vitamin Use in a Family Practice Residency Clinic

D'Amico M, Baumgardner DJ, Brill JR (Milwaukee)

Purpose: National family medicine associations have recommended that residency program directors increase resident involvement in research. Our purpose was to evaluate the educational potential of an all-residency research project. We chose to investigate vitamin use in an urban ambulatory clinic population.

Methods: A combined resident/faculty meeting was

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held to "discuss research", and the concept of an "all-residency" project was presented and embraced. The large group selected the topic, formulated the research questions and developed a questionnaire. All providers were to randomly administer the anonymous survey to 15 adult clinic patients, in anticipation of a 66.7% return rate. A post-data collection survey was administered to participating providers to elicit feedback on barriers to participation and the utility of the project. Data were analyzed using Epi Info software, and presented to the large group.

Results: A low overall survey return rate, 34% (191/570), was apparently due to lack of provider distribution secondary to memory and time constraints. Additional pitfalls were identified. The return rate for faculty (53%) was significantly higher than that for residents (27%, $p<0.001$). The return rate per provider ranged from 0 (10/38 providers) to 100%. Forty-nine percent of patients responding were taking vitamins, most commonly multivitamins, calcium and vitamin C. Seventy-five percent indicated that their provider knew of their vitamin use; 75% spent less than $10/mon for vitamins. There were no differences between vitamin users and non-users regarding age, gender, insurance and perceived general health.

Conclusions: An all-residency research project can be used as an educational tool, particularly to teach process, despite varying levels of participant interest. Our data on vitamin use is similar to that recently obtained from another local residency study.

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Smoking Cessation Intervention Practices of Maternity Care Providers

Helwig AL, Swain G, Gottlieb M (Milwaukee)

Introduction: Despite our knowledge of the prevalence of smoking during pregnancy, its health consequences, and the success rates of various smoking cessation methods, we have little knowledge on the cessation techniques actually used by maternity care providers.

Methods: A telephone survey was used to assess the management techniques encouraged by community providers of maternity care for pregnant patients who smoke. Maternity care providers in the city of Milwaukee composed the survey population: 34 obstetricians, 33 family physicians, and 6 midwives (n=73).

Results: Virtually all providers discussed smoking with pregnant patients (98.5%); however, only 84% readdressed smoking at followup visits during prenatal care. A significant difference was seen between the family physicians and obstetricians for provision of further counseling - 96.9% vs. 71.8%, $p<0.005$. After physician advice, the most frequently used cessation intervention was smoking cessation classes (26.4%). All other interventions were used less than 20%. Providers most commonly cited addiction, habit, and environment/family as the reasons they felt their patients could not stop smoking during pregnancy. No association was found between these perceptions and the type of interventions encouraged for cessation.

Conclusions: Pregnant women are currently not being aggressively managed and encouraged to stop smoking by their maternity care providers. Providers rely primarily or solely on methods with little evidence for effectiveness , such as physician advice. Despite providers' identification of addiction and behavioral habit as the main reason their patients cannot stop smoking, this did not correlate with the management options they offer pregnant women for smoking cessation.

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Healthy Healers

Weiner EL, Swain G (Milwaukee)

Purpose: Why do some physicians thrive and others do not? Studies exploring physician functioning in the medical literature have been focused on negative behavioral indices. While much is known about impairment, very little is known about positive physician functioning. Studies exploring the etiology of physician functioning point to the physicians' family of origin. However, the few empirical studies in this area have numerous flaws. First, little or no attempt was made to control for rater bias. Second, standardized family assessment procedures were not utilized. Finally, we found nothing in the literature exploring family relationship variables that may predict positive functioning.

Methods: Questionnaires were mailed to over 600 members of a statewide organization of physicians with research interests. The questionnaire consisted of instruments that elicited data on early family relationship dynamics, life events, psychological well-being, measures of happiness and demographics.

Results: We obtained a 60% response rate to the questionnaire. Preliminary results show that current markers of psychological well-being in physicians (Autonomy, EnvironmentalMastery, Positive Relations with Others, Purpose in Life, Self-Acceptance and Personal Growth) is predicted by early family relationship dynamics. Each of the six subscales of well-being was significantly predicted by one or more family relationship subscales. Family relationship subscales that predicted well-being were Individuation, Intimacy, Cutoff, Distancing, Psychosocial Problems. Individuation, or family members' ability to maintain a well-defined self, was a positive predictor in four of the six models.

Conclusions: This is one of few studies to explore early family relationships as predictors of positive physician functioning. These results may have important implications for medical school and residency admissions processes, physician self-awareness curricula, and the delivery of family-oriented primary care.

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Cigarette Smoking in Pregnancy: Words from Mothers Trying to Quit

Hueston WJ, Spencer E, Kasik-Miller S, Barrett B, Jarecki H, Sykora J (Eau Claire)

Smoking during pregnancy directly contributes to about 10% of all fetal and neonatal mortality. This study explores issues that might be of importance to pregnant women

trying to quit but not considered by their physicians.

A semi-structured long interview was performed with 12 women who received care at a residency training clinic. Six basic trigger questions were used to stimulate discussion of motivating factors for smoking cessation, sources of information about the effects of smoking during pregnancy, and techniques used to refrain from smoking. Analysis was performed using an iterative editing strategy by a multi-disciplinary team.

Women tended to focus on two opposing forces, those encouraging smoking and those opposing it. Factors encouraging smoking included living or spending considerable time in a "smoking culture", issues of control, rebellion, and the use of smoking to relieve stress. Forces encouraging smoking cessation included establishment of a "smoke-free culture", negative health effects of smoking on baby and mother, and cultural/media messages about smoking. In particular, women found that visual images delivered on posters and in pamphlets were more influential than printed information, rational argument, or continued "advice" offered by authority figures such as physicians.

Pregnant women use smoking to satisfy many needs. To be successful, women need to feel they are the initiators or at least collaborators in the decision to stop smoking. Many view advice that threatens to take control away from them as coercive.

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Secondary Prevention Practices of Primary Care Physicians for Patients with Coronary Heart Disease

McBride P, Plane MB, Underbakke G (Madison)

Purpose: To assess the screening and management of coronary heart disease (CHD) risk factors for CHD patients in primary care.

Methods: We performed medical record reviews (MRR) and patient surveys in 160primary care physicians' practices in 4 states in the NIH HEART Trial.

Results: Of 5333 adult patients ages 21-70 sampled, 603 (11%) had CHD (angina; past myocardial infarction, bypass surgery, or angioplasty; or peripheral vascular disease). Of the 18% (n=107) who reported currently smoking, 92% reported cessation advice, 80% quit date advice, and 36% nicotine replacement prescriptions. Hypertension was documented in 402 CHD patients (70%) and 85% were on medication, 57% reported dietary advice, and 21% reported exercise advice. MRR found cholesterol levels in 96% of these patients, but lipid profiles were missing in 27%, and 18% reported not being told their cholesterol level or receiving counseling or treatment. Of the patients with lipid profiles, 39% had LDL >130 mg/dl, 21% had LDL 100-129 mg/dl, 24% had HDL <35 mg/dl, and 38% had triglycerides of >200 mg/dl. Diet was recommended to 80% of patients, but significantly less often for those with LDL 100-129 mg/dl than for those with LDL >130 mg/dl (58% vs 89%, $p<.05$). Cholesterol medication was prescribed for 31% and only 22% had treatment LDL <110 mg/dl. Significant variations occurred between physicians and practices, and practice organizational variables and physician characteristics were correlated with risk factor management.

Conclusions: Cholesterol management and lifestyle counseling are underutilized interventions in CHD patients in primary care. These analyses identify goals for practice interventions.

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Evaluation of a University-Community Partnership in Rural Health Education: Understanding the Impact on Students

Olson CA, Hand C (Madison)

Purpose: To assess the impact of the training program at a Community Education Center (CEC) in northwest Wisconsin on the knowledge, skills, and attitudes of the 65 medicine, nursing, pharmacy and social work students between 1991 and 1995. Program goals are (1) developing professional skills, (2) fostering better understanding of rural/underserved populations and communities; (3) preparing students to use more of an interdisciplinary approach to health care; (4) increasing student understanding of the concepts and applications of the community-oriented primary care (COPC) model of health care; and (5) increasing the number of students choosing to practice in rural/underserved areas upon completion of their training.

Methods: Content analysis of student journals; mail survey of former students; semi-structured interviews with selected students, community partners, and faculty advisors.

Major Findings: Most students advanced their professional skills, learned about the nature of health care in rural communities, and became aware of other models of interdisciplinary health care. Most were also encouraged to seek jobs in rural and/or underserved areas. Students made fewer gains in the area of COPC, and some had undesirable stereotypes about Native Americans reinforced.

Conclusions/Recommendations: The CEC is meeting its educational goals, some to high degree. However, there was less learning about COPC. Efforts should be increased to ensure that COPC experiences are better organized and more consistent between students. Mentoring should be provided to help students reflect on and give meaning to their clinical and community-based experiences to increase the likelihood that those experiences will result in desirable outcomes.

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Journaling: A Rich Education Tool

Schilling R, Hueston W, Suechting R (Eau Claire)

Purpose: To identify key issues of medical students in a family medicine clerkship.

Methods: Data collection: As part of a module on doctor-patient communication, five groups of six medical students in a third year primary care clerkship completed journals reflecting on their experiences in training. Data

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analysis: Three faculty members independently reviewed each of the journal entries and selected passages that each deemed particularly striking or illustrative.

Results: Themes that emerged for two or more readers included: gender issues, professional identity in emergence, rural practice, primary care versus hospital-based medicine, role model issues, and appreciation for the art of medicine. Journal entries ranged in content from impersonal report of facts learned to detailed reports of personal thoughts, feelings, and values.

Conclusions: Journaling assignments provide quick access to inner worlds of students. The stark contrast in levels of richness of excerpts raises a question of possible use as an indicator for intervention or for clarification of choice of medical field.

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Characteristics of Persons with Chronic Fatigue Syndrome

Hartz AJ, Kuhn EM, , London R (Milwaukee)

Background: Chronic fatigue syndrome, CFS, is a complex, poorly understood condition in which the patient experiences debilitating fatigue and other characteristic symptoms. In this study we examined a population of patients with chronic fatigue to identify the most important risk factors for criteria used to define CFS.

Methods: Subjects were patients of clinical participants in the study or members of the Wisconsin Chronic Fatigue Syndrome Association. All subjects completed an extensive questionnaire and met severity criteria for chronic fatigue. Patient characteristics were tested for an association with each of four criteria previously identified in the literature as fundamental features of CFS: 1) very severe fatigue, 2) fatigue that lasts for 24 hours after exercise, 3) fatigue that began suddenly following an infectious illness, and 4) symptoms that met the CDC definition of CFS.

Results: Persons with characteristics of chronic fatigue syndrome were more likely to be so severely affected that they did not have a job, very adversely affected by alcohol, and more likely to have multiple somatic complaints, particularly those that could be symptoms of infectious illness or immunological response. There was no evidence of psychological differences between persons with chronic fatigue syndrome and other persons with chronic fatigue.

Conclusions: Some somatoform symptoms are now included in the definition of CFS are as strongly associated with CFS as symptoms that are included. The data provided evidence that CFS in some patients may have an infectious or immunological cause.

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Changing Provider Practice Through Humor: UTI Clinical Guidelines

Thompson M, Brill JR (Milwaukee)

The purpose of this project was to profile current patterns of clinical management of uncomplicated urinary tract infections (UTIs), and to assess the educational approach most conducive to changing these practices.

A retrospective chart review of all diagnosed UTIs identified from clinic billing records in a six-month period in a family practice residency clinic was conducted. Patient and treatment data were collected and analyzed using Epi-Info.

Eighty UTIs were examined; 41 met the criteria for uncomplicated urinary tract infection (female gender, age 14-65 yo, not pregnant or diabetic, no catheter or institutionalization, no coexisting conditions such as nephrolithiasis, not systemically ill). The treatment of these uncomplicated UTIs was compared to the optimal treatment reported in the literature (three-day treatment with Bactrim, with no initial culture and no routine followup).

A surprisingly low 10% of patients with uncomplicated UTI met the standard for optimal care. The primary reason for not achieving this was the duration of treatment, with only a quarter of subjects following the three-day standard. In addition, 63% of patients had cultures done, 28% had a different antibiotic chosen, and 18% had a routine followup appointment scheduled. The percentage of cure achieved was consistent with reported literature (95%).

In the educational intervention, two groups composed of two clinical teams each are being compared. One group received only a memo regarding optimal diagnosis and treatment of uncomplicated UTIs; the other received the memo, viewed a humorous videotape presentation and had an opportunity to ask questions concerning this process. A second six-month chart review will be analyzed for comparison.

Addendum: A second six-month chart review was conducted following the educational interventions. The initial results are encouraging, although there were insufficient numbers to compare the intervention and control groups. A total of 32 UTIs have been analyzed, with 21 excluded for not meeting criteria for uncomplicated UTI. Of those remaining, 54.5% met the standard of care for treatment of uncomplicated UTI with a 95% cure rate maintained. Further work will be needed to address such issues as increased sample size and the best methods for implementing practice guidelines in a residency setting.

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Assessment of Opportunities for Preconception Care

Adams AK, Temte JL (Madison)

Purpose: To determine the opportunities for preconception care at a family medicine clinic in order to better understand the role of the family physician in preconception counseling.

Methods: A retrospective chart review was conducted of 100 charts from women receiving prenatal care at an urban residency clinic from 1/93-1/95. Data collected included demographics, alcohol, tobacco and drug use, intent to breastfeed, date and context of last prematernity visit and the interval between prior visit and estimated date of conception. Differences between women presenting after conception, 0-90 days and greater than 90 days priorto conception, were analyzed with chi-square and ANOVA tests.

Results: For the entire sample, mean age was 27.6 ± 6 yrs, with mean gravida 3 ± 2, para 1 ± 2. 66% were Caucasian, 22% African-American, 7% Hispanic/Native American and 5% Asian. Whereas 46% of the women abstained from alcohol prior to pregnancy, 21% were rare users, 28% occasional and 4% were moderate to heavy drinkers. 69% were nonsmokers, 22% ≤ 1/2 ppd, 7% ≤ 1 ppd. 6% of the women were drug users. Of the 100 women, 31% did not present to the clinic prior to pregnancy. Of the remaining women, 10% presented already pregnant, according to estimated date of conception and were deleted from statistics. Of the remaining 59 women, 29 presented between 0-90 days and 30 presented >90 days prior to conception. Women presenting prior to conception were significantly older, with a higher percent married, educated beyond high school and insured. No differences were found in ethnicity, substance use, gravida or intent to breastfeed between women presenting prior to or after conception. At the last visit prior to conception, 17% of the women presented for urgent care, 19% well-woman visit, 23% other problems and 17% fertility related issues. Of all the women presenting prior to pregnancy, only 12% received any preconception counseling.

Conclusions: This study shows that the majority of women presented to an urban family medicine clinic within one year prior to conception and were available for preconception counseling. It points to the need for improved efforts at preconception counseling at a variety of patient care visits.

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Serum Potassium Levels in Caucasian and Hmong Samples in Wausau, Wisconsin

Gavin E, Scully H, Hendricks B (Wausau)

Background: In some studies, a significant difference in serum potassium levels has been shown between American and Chinese males. At Wausau Hospital, it was noted that a subgroup of the population, the Hmong from southeast Asia, tend to have lower serum potassium levels than the Caucasian population without any obvious clinical reason. The purpose of this study is to determine if there is a significant difference in serum potassium levels between these two sample groups.

Methods: This study used a retrospective chart review. The Hmong potassium levels were drawn as a part of a chemistry panel as part of the new immigrant physical exams (n=120, male=69, female=51, age 1-83). The data for Caucasian men were obtained from employment physical exams (n=30, male=30, age 25-57). Data for Caucasian women and children were obtained from routine labs (n=23, female=15, male=8, age 0-58). Any medical condition or medication which would alter serum potassium levels would exclude patients from the study.

Results: The mean for the Caucasian sample was 4.16 (s=.325) and for the Hmong sample 3.85 (s=.368). For the Hmong, there was a significant decrease in potassium levels with age. For the Caucasians, however, age was not significant. To control for age, a two-way Analysis of Covariance (ANCOVA) was conducted which showed a significant main effect for ethnicity [$F(1,168)=35.21$, $p < .001$] with Caucasian and Hmong age-adjusted means of 4.22 and 3.83 respectively.

Conclusion: The results indicate that the Hmong have a lower average serum potassium level than Caucasians and their "normal range" would also be lower. This may be due to the factthat all the Hmong data come from new immigrants and the difference may lie in environmental factors such as climate or diet.

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Breastfeeding and Lactation Education in Medical Schools

McKeown-Lugaro A, Eglash A (Madison)

There has been increasing awareness that physicians in training are undereducated in the field of breastfeeding and human lactation. Further, studies have shown that physicians who are able to counsel their patients on breastfeeding achieve a greater initiation rate and duration of breastfeeding among their patients. Most studies have investigated the knowledge of practicing physicians and residents, and not medical school curriculums, especially in the first two years. This survey and study was designed to answer the question of whether it is true that medical schools do not provide adequate and comprehensive instruction to their students, while at the same time educating the directors of curriculum of the availability of multiple model curriculums that can be incorporated at their institution.

The objective is to determine if there is a planned effort in medical schools to provide comprehensive lactation education, or is it a random unstructured process. A standardized survey was mailed to the curriculum coordinator to be answered and returned in an enclosed self-addressed envelope, to them review and interpret the returned surveys and formulate a summary and conclusion. The analysis will be simple due to the nature of the survey.

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Collaborative Live Supervision in a Family Practice Residency Program

Weiner EL, Swain G, Scarpinato L (Milwaukee)

Purpose: Work performed by medical practitioners in training rarely involves direct observation by faculty. Supervision commonly consists of a trainee summarizing the data obtained and diagnostic impressions, and discussion of treatment plans. Other helping disciplines such as nursing and social work include direct observation in training. Without direct supervision of their work, future medical practitioners may make incorrect or incomplete judgements or may be unrealistic about their interview strengths and limitations.

Methods: We devised a practical, collaborative teaching model in which the staff family therapist and a faculty physician observe trainee-patient encounters in a family practice clinic in order to provide the trainee with feedback about biopsychosocial aspects of the encounter and increased awareness of interviewing styles.

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Using closed circuit television observation by the supervision team, the resident or medical student conducts an interview through the physical exam. He or she then joins the supervision team in the staffing room for discussion of physical examination techniques, data collection, hypotheses, treatment, psychosocial issues, and interviewing techniques. Following this discussion, the trainee returns to the examining room and completes the visit. The trainee and supervisory team then meet for debriefing. The team then gives the trainee a written summaryand evaluation.

Results: In the first year of CLS, 6 fourth year medical students, 6 interns, and 1 second year resident were observed. Open-ended evaluation forms elicited a broad range of comments, so far, all positive. Qualitative analysis of the responses revealed the following common themes: "Have not had this type of feedback since the end of sophomore year when first learning physical diagnoses and history taking. This gets me to rethinking the process (e.g., active listening, open-ended questions)," and "Helped make me aware of my interaction with the patient and whether it was positive or negative," and "Provided reassurance that interviewing/exam skills are developing well - a confidence booster." Plans are underway to extend CLS to all years of the residency program, permitting us to follow the development of skills throughout training.

Conclusion: Collaborative Life Supervision (CLS) appears to be a strong teaching tool. The scope of observed data is much broader than the data presented in typical staffing interactions. As a result, the range of feedback is broadened to include personal and professional insights, developing realistic expectations, respecting patients' illness perspectives, and eliciting other family members as resources. It is also a very effective tool for modeling truly collaborative interactions among health professionals (the supervisory team) of different disciplines.

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Three Year Followup on Systematic Cholesterol Screening

Pribbenow B, Hahn DL (Madison)

Background: There have been few reports on feasibility and effectiveness of systematic cholesterol screening in non-academic primary care practices. A one-year followup study from this setting found a high acceptance rate (95%) for systematic total cholesterol (TC) screening during acute care visits and a significant reduction in TC after one year in patients with an initial high-risk value (>240 mg/dL) (-9.2%, P<0.0001 compared to baseline). The goals of this study were to (1) report followup results of continued systematic screening for all TC risk strata and (2) explore statistical evidence for regression to the mean as an explanation for some of the TC changes found in this uncontrolled clinical experiment.

Methods: TC screening was recommended to all patients encountered, the majority of whom were seen solely for acute care visits. Only those with another identified primary care provider were excluded. All screened patients, regardless of risk classification, were mailed their TC value as well as information and instructions to adhere to a "prudent" diet. High risk screenees (TC>240 mg/dL) were instructed to return for a lipid panel and individualized management. Moderate-risk patients (TC greater than 200 mg/dL and less than 240 mg/dL) were instructed to return in one year for a repeat TC. Low risk patients were told to have a TC check in 4-5 years. Cholesterol data were entered into a computerized database. A systematic sample of medical records of moderate risk screenees with followup TC results was reviewed for evidence of physician intervention or patient lifestyle changes.

Results: From 1987 to 1995, 2,490 adult outpatients (56% male) had an initial TC screening test (62% low risk, 26% moderate risk, 12% high risk). Screened adults (18 years or older) with a followup TC value obtained no less than 3 months from initial screening were defined as the study group (SG) of interest (774 patients). Compared to patients who did not have followup, SG patients were significantly older (48 v 36 y) and had higher initial mean TC(212 v 183 mg/dL) but an identical sex distribution (56% male). Forty-nine percent of high risk, 38% of moderate risk and 17% of low risk patients were in the SG. Length of followup (3 y) did not differ between risk strata. TC results stratified by risk group are presented in the following table:

	Low risk	Mod. risk	High risk
No.	304	292	178
Mean TC, mg/dL			
Initial	168	219	275
Followup	181	215	246
Difference	+13	-4	-29

Statistical analysis revealed that the 29 mg/mL (-10.5%) decrease in TC for high risk patients was not explainable by regression to the mean. Changes in TC for the moderate risk group were of the magnitude expected from regression to the mean. Chart review found little relevant documentary evidence and no correlations of interventions and lifestyle changes with TC changes in moderate risk patients.

Conclusions: Unlike for high risk patients, for whom tailored intervention resulted in a significant decrease in TC over 3 years of followup, minimal intervention (TC feedback and mailed recommendations) had no measurable effect on TC in moderate risk patients.

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Family Physicians, Personal Values, Age, Practice Satisfaction and Access to Health Care

Eliason BC, Gottlieb M (Milwaukee)

Background: Improving access to health care for Americans is a major goal in any health care reform. The personal values of physicians are seldom considered, but may be important in health care access. A previous study among exemplary family physicians indicated a positive correlation between the benevolence personal value type (consisting of the individual values of honesty, helpful-

ness, loyalty, forgiving, and responsible) of physicians and practice satisfaction and conversely a negative relationship between the power value type (consisting of the individual values of social power, authority and wealth) and practice satisfaction. Several studies have shown that there is a relationship between personal values and specialty choice with generalists rating benevolence values higher and power values lower than specialists. We hypothesize that among primary care physicians, those who emphasize benevolent personal values will be more likely to provide care for the underserved and to practice in underserved areas. We also wished to confirm the association between practice satisfaction and certain value types and compare the value types of physicians at different ages.

Methods: We surveyed a stratified probability sample of 1224 practicing family physicians about their personal values (using the Schwartz values questionnaire), practice satisfaction, practice location, breadth of their practice, demographics, board certification status, teaching involvement, and the payor mix of their practice. The sample is stratified by age groups, payor mix (high access vs. low access) and location (urban vs. rural). Three mailings were sent along with a postcard reminder after the initial mailing.

Associations are being assessed between self-reported values, age, practice demographics, practice satisfaction and higher access (>40% Medicare, Medicaid, and indigent) vs. lower access (<30% Medicare, Medicaid, and indigent) or restriction to patient care.

Results (preliminary): We had 714 useable questionnaires returned (14 were not useable) for a 59% response rate. The highest rated single values were family security and honesty and the lowest were social power and detachment. These family physicians rated the benevolence value type highest and the power value type lowest.

Preliminary analysis did not find any significant association between access to care and the value type ratings. Practice satisfaction was positively associated with the ratings of the benevolence value types ($p=<0.000$) and the conformity value types ($p=0.050$); and negatively associated with the power value type ($p=0.015$) and self-determination value type ($p=0.030$).

Value type ratings and the age of the family physicians were associated with older physicians rating the value type of conformity ($p=<0.05$), security ($p=<0.05$), and tradition ($p=<0.05$) higher and the value types of self-determination ($p=<0.05$), universalism ($p=<0.05$) and stimulation ($p=<0.05$) lower than the younger physicians.

Conclusions: Family physicians should be aware that increased practice satisfaction should follow greater emphasis on benevolent values and less concern about controlling others and acquiring resources.

Personal values change as family physicians age, with older family physicians valuing tradition, conformity, and especially security while younger physicians are more concerned with self-determination, stimulation and universalism values.

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Hmong/Medicine Interactions

Barrett B, Shadick K, Spender L, Schilling R, del Rosario S, Moua K, Vang M, Yang S (Eau Claire)

This paper explores interactions between Hmong patients and their health care providers in Eau Claire, Wisconsin. The Hmong derive from a clan-organized mountain-living agricultural people historically located in southern China and southeast Asia. Following the Indochinese wars, many Hmong families immigrated to the United States, especially the West Coast and the Midwest. With the explicit goal of improving health care, we interviewed 23 Hmong patients, 18 health care providers and 6 translators concerning their experiences with cross-cultural medicine. Interviews were translated, transcribed, analyzed and discussed following a qualitative approach aimed at identifying important themes. Not surprisingly, the idea that Hmong patients and their Western-trained providers have differing health belief systems emerged as a dominant theme. Both textual and cultural translation were seen as problematic. Additionally, an overwhelming number of patients identified kindness, caring and a positive attitude as important provider characteristics. Providers identified Hmong as cooperative, family-oriented patients, but noted difficulties in understanding Hmong conceptions of acute versus chronic diseases, health-maintenance/illness prevention, and both physical and psychological pain. Many respondents, both Hmong and Caucasian, gave suggestions for improvement, including (1) learn more about each others' culture, (2) increase the time allotted for translated clinical encounters, (3) improve translation quality, (4) explain medical terms using visual aids, (5) respect Hmong family-centered decision-making, (6) be patient, kind and positive; avoid negative statements or predictions, and(7) train Hmong health care providers, especially doctors and nurses.

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The Use of Dietary Supplements and Home Remedies Among an African-American Ethnic Population

Cronin P, Eliason BC (Milwaukee)

Background: Dietary supplements are rapidly gaining popularity around the world, but little is known about who is using them. Many of these dietary supplements have been found to be beneficial, but contamination, mislabeling, and the toxicity of some plants has resulted in toxic reactions. The use of dietary supplements is not well defined among ethnic populations. Several surveys performed among mainly Caucasian populations indicate that about 50% of the population use dietary supplements. We hypothesize that the use of dietary supplements will vary significantly among different ethnic groups.

Methods: The study consisted of interviewing 200 African-American patients over the age of 18 who recently visited a family practice clinic in Milwaukee. The patients were questioned about their use of dietary supplements, home remedies, prescription and non-prescription

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medication, and general demographics. Patient confidentiality was assured.

Results: Thirty percent of the patients were currently taking some type of dietary supplement, and 40% were currently using some type of home remedy. Those who were employed or students were taking significantly more supplements than those not working. The employed also used more home remedies than those who were unemployed. Patients with at least some college education used more supplements and home remedies than those with only a high school education.

Conclusions: African-American patients consume fewer dietary supplements than a predominately white population. The African-American patients who were employed and had some college education used more dietary supplements. With few exceptions the supplements consumed appeared to be safe.

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The Prevention Coordinator in Primary Care Practice

Underbakke G, Kushner J, Gjerde C, Plane MB, McBride P (Madison)

Purpose: To examine the activities and effectiveness of a prevention coordination (PC) placed in primary care practices in four Midwestern States to promote and support improved prevention organization and patient education.

Methodology: The HEART Project provided 22 practices with a PC (nurse, dietitian, or health educator) for a period of 48 weeks. PCs were jointly hired by the practice and HEART, trained and supported by HEART, and directly supervised by the practice. Data on PC activities and effectiveness were gathered through patient questionnaires, physician and staff questionnaires, conference calls to the PCs, PC exit interviews, and daily activity logs kept by the PCs. Qualitative data were interpreted and summarized using a case study approach.

Results: Prevention Coordinators spent an average of 53% of their time on patient education activities (range 25% to 80%) and 30% of their time on practice prevention organization (range 8% to 68%). Time spent on patient education vs. practice organizationvaried depending on professional training and past work experience of the PC, and practice support for the PC role. PCs trained in health education, or masters level nursing or dietetics were more likely to work on organizational changes and staff education. Among patients, 98% who participated in PC education sessions were satisfied with the service, and 96% thought the education should be a part of regular clinic services. Overall, 61% of practice staff and physicians were very satisfied and 27% were satisfied with the results of the Prevention Coordinator position. The case studies yielded a clear profile of the type of practice that supported and fostered effective Prevention Coordinator activities. In the supportive practice, practice members shared a common vision, a commitment to prevention, a team orientation, and a system for communication. Practices that were negotiating or in the process of a merger or buy-out were less able to integrate the PC role than those who were not, although practices with a supportive environment were less affected by this.

Conclusion: The Prevention Coordinator position was well received by patients, staff and physicians in many primary care practices. Practice supportiveness had a large impact on the integration and activities of the PC role. For best results, a practice considering the addition of a person to support prevention activities should assess their practice characteristics and work to provide a supportive environment.

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Factors Influencing Response to Exercise in Patients with Chronic Fatigue

Peterson JA, Kuhn EM, Hartz AJ (Milwaukee)

Fatigue is prevalent in the medical and greater communities. This study focused on chronic fatigue syndrome (CFS) patients fitting Fakuda's definition of CFS and chronic fatigue sufferers, defined by the Rand Viltality index.

Women aged 40-60 years who fit one of the above definitions participated in a mental and submaximal exercise stress test. Their heart rate and blood pressure responses were monitored through the tests and at specific intervals after exercise. Subject Rate of Perceived Exertion (RPE) from the unmodified Borg scale was given during exercise.

Thirty-two women, 14 fitting Fakuda's definition and 18 with lesser fatigue, completed the protocol. RPE was strongly associated with both baseline fatigue level ($p=.0002$) and number of somatoform symptoms not used in the CFS diagnosis ($p=.005$). Those same symptoms were also correlated with unusual fatigue 24 hours after exercise ($p=.013$), and the number of CFS symptoms was correlated with RPE ($p=.010$). No strong correlations between subject fatigue symptoms and physiological exercise or mental stress response were observed.

These results suggest that CFS may not be a discrete condition. The present CFS definition is in need of further clarification for clinical and research use since somatoform symptoms not included had a stronger relationship with fatigue than those presently used.❖

The Medical Outcomes Research Project Low Back Pain Study

Norman W. Hoover, MD, Milwaukee and Sally L. Wencel, JD, Madison

Why study low back pain?
Next to the common cold, low back pain is the most frequent reason patients seek medical attention. The annual incidence of back pain is 30-60% and it is the most common cause of disability in people under 45 years of age. As many as 80% of Americans will be disabled by back pain at some time during their lives.[1]

When the expert panel convened by the Agency for Health Care Policy and Research reviewed the literature of low back pain, it collected about 11,000 papers. However, among them, only slightly more than 250 were sufficiently statistically reliable for use as evidence,[2] and there had been only one acceptable randomized clinical trial.[3] There is certainly no shortage of opinion on how to treat low back pain, but it is widely divergent and its validity generally unsupported.

Cherkin summarizes the problem with low back pain treatment: "uncomplicated mechanical low back pain is a common problem for which no useful diagnostic test is available, and for which few treatments have been proven effective."[4] Diagnostic and therapeutic methods for low back pain are widely varied[5] and cover the spectrum of health practices.[6] When applied to the treatment of low back pain, there can be no question of Wennberg's dictum: "failure to evaluate the outcomes of care makes it possible for different theories and opinions on the risks and benefits of alternative treatments to coexist, unchallenged by fact."[7]

Dr Hoover is chair, SMS Foundation Medical Outcomes Research Project Low Back Pain Study Group. He is an orthopaedic surgeon from the Milwaukee Medical Clinic, Milwaukee, WI.

Variation--a sequel of uncertainty
Variations in diagnostic testing and treatment of low back pain mirrors the confused state of knowledge of cause, pathogenesis, and natural history of the condition. The evidence is that variation is not idiosyncratic nor peculiar to back pain, but is widespread and exists nearly everywhere in medical practice. Those who have studied variation conclude that contributing causes are many, but that the root cause is uncertain. The assumptions that variation results from financial incentive or lack of personal learning have been fairly disputed. All evidence points to a lack of information from which to create knowledge upon which to base medical decisions. Out of this dilemma comes the realization that we need a different kind of "real world" research and "real time science." What has emerged has come to be called "outcomes research."

Outcomes Research Project of the SMS Foundation
Determining the ultimate effect of medical care as perceived by recipients of care is not a new idea, but only recently has gained attention under the rubric "outcomes assessment." "Outcome" is variously defined, but in this context means the effect of care as perceived by patients in terms of symptomatic relief, improved function, enhanced quality of life and satisfaction with care.

In contrast, "outcomes" usually measured in conventional biomedical research have been changes of biochemistry, physiology or biomechanics, all surrogate markers from which benefit is inferred. The gold standard for biomedical research has been the randomized clinical trial which gives statistical strength to proofs of efficacy, showing that an intervention has or has not produced its intended effect. That research has been absolutely necessary to determine "what works."

Patient-centered "effectiveness research" is not competitive with "efficacy research," but is rather a necessary companion to it. We must know first that a treatment produces an intended effect, but must still determine whether the effect brings about a benefit in a way perceptible to a majority of patients -- "what works best" in practice. The addition of community outcomes assessment to conventional academic research offers promise, but requires that studies be conducted with no less rigorous evaluative science.

Wisconsin physicians gathered four years ago to structure the organization and method to generate the necessary new information. The details of this undertaking are described in detail in previous issues of this journal.[8 9 10] The Project leadership decided to study conditions that are common in primary care, frequent in occurrence, widely varied for treatment, and

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which produce high cumulative costs. Project "study groups" determine what is needed for each of the areas chosen for study. The first conditions for study are low back pain and asthma.

The Wisconsin Low Back Pain Study Group

The study group for low back pain began meeting in July, 1996. Its members represent primary care, osteopathic medicine, orthopaedics, spinal surgery, physiatry and rheumatology. These members come from rural and urban settings and from large and small practice groups. An epidemiologist has provided guidance for developing evaluative methods. Meetings have been held monthly, either in person or by conference call.

A national consortium[11] also worked on creating a variety of patient questionnaires covering musculoskeletal conditions, among them a group of instruments for back pain. The Wisconsin Back Pain Study Group has worked closely with that consortium's measurement methodology to ensure that Wisconsin data will be comparable to national norms. However, we have added two modules not contained in the national tool that collect information about treatment being used and employment history. This additional information is considered by the study group to be necessary if we are to relate the outcome of low back pain to measurable variables of activity or management.

Summary

Low back pain management varies widely and in ways that can't be explained on bases of patient differences or upon known efficacy of the different methods of care. The benefits of most of the methods of care remain unproven. We propose that outcomes measurement and research, based upon information given by patients about the end results of care, will provide valid indicators showing which care is best.

Those are the fundamental reasons for this investigation, but to study back pain earnestly will give evidence that those who are involved in the study intend to prove "best care" and to improve their own practices. There is no better way to evaluate and prove the quality of our practices than to determine the real outcome of what we do, as perceived by our patients.

The SMS Foundation encourages physicians practicing in Wisconsin to become involved in the outcomes research activities of the Foundation. We believe this proof of effectiveness of care is the best answer the health professions can give to the questions being asked about the value of the care we provide.

For more information about the Low Back Pain Study, please contact Mark Meaney, Lynne Thomas or Sally Wencel at the SMS Foundation Medical Outcomes Research Project.

Low Back Pain Study Group Roster

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Mile Bluff Clinic - Mauston

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References

1. Hart LG, Deyo RA, Cherkin DC. Physician office visits for low back pain. *Spine*. 1995;20:11-19.
2. Sussman J. AHCPR guideline on acute low back pain problems. *American Family Physician*. 1995; 51:334-340.
3. Weber H. Lumbar disc herniation: a controlled prospective study with ten years of observation. *Spine*. 1983; 8: 131-40.
4. Cherkin DC, Deyo RA, Berg AO. Evaluation of physician education to improve primary care for low back pain. *Spine*. 1991;16:1168-1178.
5. Cherkin DC, Deyo RA, Wheeler K, Ciol MA. Physician views about treating low back pain. *Spine*. 1995;20:1-10.
6. Carey TS, Garrett J, Jackman A. The outcomes and costs of care for acute low back pain among patients seen by primary care practitioners, chiropractors, and orthopedic surgeons. *N Eng J of Med* 1995; 333: 913-917.
7. Wennberg JE, Cooper MM. The Dartmouth Atlas of Health Care. Chicago: American Hospital Publishing. 1996.
8. Ingalls JM, Wencel SL, Alles PJ. The SMS-CESF medical outcomes research project. *WMJ* 1994; 93: 433-437.
9. Wencel SL. Creating the medical outcomes research project: an update. *WMJ* 1995; 94: 37-39
10. Alles P. CESF medical outcomes research project: implementing outcomes assessment in a clinical setting. *WMJ* 1995; 94: 27-31.
11. American Academy of Orthopaedic Surgeons, North American Spine Society, Scoliosis Research Society, Orthopaedic Rehabilitation Association, American Spinal Injury Association, Council of Spine Societies. ❖

Low Back Pain Study Hypotheses:

1) Providers of treatment for patients with acute low back pain vary in their methods of treatment in ways that cannot be explained by the variation in patients and condition, and

2) Variation in treatment method for acute low back pain affects patient outcomes in terms of functional health status, quality of life, employment status, and satisfaction.

I. STUDY SITE

The project is designed to allow any willing physician to participate (please see "Memorandum of Understanding.") There is no stated requirement that all physicians from each participating office or clinic participate in the study.

II. PATIENT ELIGIBILITY AND ENROLLMENT

A. ELIGIBILITY

Patient Selection
Age: 18-65
Presenting with acute low back pain. ICD-9 codes of 721.3, 722.1, 722.52, 724.02, 724.2, 724.3, 846.0 or 847.2.

B. ENROLLMENT
(For general information, please refer to Project Data Collection Manual pp. 3-5.)

Patient Consent:
Participation is voluntary and patient informed consent will be obtained. (Project policy: consent form and patient information materials have been prepared.)

Enrollment Process:
The study will include continuous open enrollment of patients seen for low back pain in the office setting.

Regardless of identification, patient is asked to participate, given information and consent forms. Baseline measurement is taken in office or by mail prior to patient's visit with physician.

Sampling:
The Low Back Pain Study suggests a target of 30 patients per site. This target may be reached over time (cumulatively.) The more patients each site studies, the higher the statistical power available for the site's data.

III. MEASUREMENT TOOLS

Domain	Form
Patient Case Mix	Patient Demographics Survey; Low Back Related
Process Measures	Low Back Treatment Module
Outcome Measures	Employment Module, Lumbar Module
Satisfaction/ Access to Care	Patient Satisfaction Questionnaire

IV. BASELINE MEASUREMENT

PROTOCOL

SF-36, Demographics Module, Treatment Module, Employment Module, Lumbar Module and Patient Satisfaction Questionnaire (standardized with national Muscloskeletal Outcomes Data Evaluation and Management System) using survey methodology outlined in the Project Data Collection Manual.

V. INTERVENTION

As defined by the study question, the intervention will consist of:
1. Providing standardized process and outcomes measurement tools and protocols.
2. Providing data feedback.
3. Developing educational materials directly for use by patients and physicians based on findings of the low back pain study.

VI. REMEASUREMENT

Follow-up: 6 weeks, 3 months and 1 year

VII. REPORTING AND ANALYSIS

The SMS Foundation Medical Outcomes Research Project will be the data repository for low back pain data collected through the study plan. Data will be maintained, secured and released according to the Project's Data Confidentiality and Security Policy

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(attached). The Project can accommodate data or surveys sent one of three ways:

1) Modem: Data should be sent in .DBF or ASCII fixed format. More detailed instructions will be developed with each project site.

2) Mailed diskettes: Data files on diskette should be in .DBF format if possible, otherwise ASCII fixed format.

3) Fax Scanner: Sites may either fax scannable forms provided by the Project or mail completed forms to the Project.

Patient level reporting
Individual patient reports will be developed by the Project and sent (via disk, modem, paper) to participants with population norms and aggregate low back pain norms when available. Participating sites will have the key to individual patient identities and treating physicians, and will be responsible for disseminating this information. (The Project does not maintain patient identifiable data and patient files are assigned an up to nine digit number for each participating patient.)

Clinic level reporting
The point of contact between the Project and Low Back Pain Study participant is referred to as the "clinic", even though smaller groups may be participating through individual clinicians. The Project is designed to transfer information back and forth through the clinic's designated "Point" person. As described above the point person will have the keys to the identity of enrolled patients and their treating physicians. The chief expectation of the clinic level reporting is to provide benchmarking information to gauge and improve performance. Aggregate and individual physician reports will be produced on a schedule to be determined by the Low Back Pain Study Group.

Low Back Pain Study Group Level Reporting
The Low Back Pain Study Group will regularly review case mix, process and outcomes data as the Study proceeds to look for correlations between the elements. As this information becomes available, the Study Group may determine additional low back pain indicators for distribution to the participating clinics.

A primary goal of this health services research is to investigate the study hypotheses and disseminate this information to improve care. The Low Back Pain Study Group will also regularly review the reporting and analysis functions to improve the process and substance of reports as well as evaluate the information needs of the Study. ❖

41. Do you currently smoke cigarettes?

- O Yes
- O No, I quit in the last 6 months
- O No, I quit more than 6 months ago
- O I have never smoked

What results do you expect from your treatment? (Mark one response for each question.)

	Not at all likely	Slightly likely	Somewha likely	Very likely	Extremely likely	Not Applicable
42. Relief from symptoms (pain, stiffness, swelling, numbness, weakness)	O	O	O	O	O	O
43. To do more everyday household or yard activities	O	O	O	O	O	O
44. To sleep more comfortably	O	O	O	O	O	O
45. To go back to my usual job	O	O	O	O	O	O
46. To exercise and do recreational activities	O	O	O	O	O	O
47. To prevent future disability	O	O	O	O	O	O

48. If you had to spend the rest of your life with the symptoms you have right now, how would you feel about it?

- O Very dissatisfied
- O Somewhat dissatisfied
- O Neutral
- O Somewhat satisfied
- O Very satisfied

49. Which health care provider have you used for your current condition? (Mark all that apply)

- O Acupuncturist
- O Chiropractor
- O Emergency Room
- O General Practitioner
- O Internist
- O Massage Therapist
- O Neurosurgeon
- O Osteopathic Physician
- O Pain Clinic
- O Physical Therapist
- O Rheumatologist
- O Work Hardening Clinic
- O Nurse Practitioner
- O None of the above

Lumbar Module *

*Source: AAOS/COMSS/COSS Spine Outcomes Data Collection Instrument (c.1996) : American Academy of Orthopaedic Surgeons, North American Spine Society, Scoliosis Research Society, Cervical Spine Research Society, Orthopaedic Rehabilitation Association, American Spinal Injury Association, and Council of Spine Societies

PLEASE ANSWER EVERY QUESTION IN THE BOX BELOW

In the past week, how often have you suffered:	None of the time	A little of the time	Some of the time	A good bit of the time	Most of the time	All the time
1. Low back and/or buttock pain	O	O	O	O	O	O
2. Leg pain	O	O	O	O	O	O
3. Numbness and/or tingling in leg and/or foot	O	O	O	O	O	O
4. Weakness in leg and/or foot (such as difficulty lifting foot)	O	O	O	O	O	O

Baseline Measurement Protocol sample.

Update on Informed Consent Law: The *Johnson V. Kokemoor* Decision

Daniel L. Icenogle, MD, JD, Madison

Oliver Wendell Holmes once wrote, "Great cases, like hard cases, make bad law."[1] However, after a recent Wisconsin Supreme Court opinion on informed consent, many physicians might have written that, "unusual cases make for bad law."

In the case, *Johnson v. Kokemoor*,[2] the court was presented with a unique set of circumstances concerning allegations that a physician misrepresented his experience and otherwise failed to provide proper informed consent for a surgical procedure. Few would argue that the allegations, if true, represented a negligent attempt at obtaining under informed consent law as it stood. Unfortunately for those of us practicing medicine in Wisconsin, the court may have made some very bad law by taking the opportunity to paint both broadly and vaguely in an effort to further refine the concept of informed consent.

Background

In 1990, Donna Johnson was suffering from headaches and a CT scan revealed a posterior circulation aneurysm at the bifurcation of the basilar artery. Her family doctor referred her to Dr. Richard Kokemoor, a Chippewa Falls neurosurgeon. Although he did not feel the aneurysm was a cause of her headaches, Dr. Kokemoor recommended clipping the aneurysm, as it had an annual 2% risk of rupture. The surgery was a technical success and the aneurysm clipped. However, Mrs. Johnson was rendered neurologically impaired, being unable to walk or control her bowel or bladder. In addition, her vision, speech and upper body coordination were impaired. All of these complications represent known risks of this type of repair and there was no allegation of negligent surgical technique on the part of Dr. Kokemoor.

Instead, Mrs. Johnson sued Dr. Kokemoor alleging his failure to obtain proper informed consent as required by Wisconsin state law. Specifically, she alleged at trial that, in the course of informing her about the need for surgery and his experience with the procedure, Dr. Kokemoor overstated both the urgency of the operation and his experience with this type of surgery. In particular, Mrs. Johnson presented evidence at trial that Dr. Kokemoor told her he had performed the surgery "dozens" and "lots of times." In fact, he had performed thirty aneurysm procedures while a resident, none involving the posterior circulation, and, since his residency, he had performed two basilar bifurcation procedures among the nine aneurysms he had operated on.

In addition, Mrs. Johnson alleged Dr. Kokemoor understated the morbidity and mortality rate associated with basilar bifurcation aneurysm surgery, especially the risk given the relative inexperience Dr. Kokemoor had with the procedure. She claimed he told her the surgery had a 2% risk of death or serious impairment, comparing it with routine procedures such as an appendectomy or tonsillectomy. Her medical experts testified that, in the best of hands, the procedure carried a 10% risk of mortality or morbidity, while an inexperienced physician, such as Dr. Kokemoor, would likely have a 30% complication rate. Finally, she pointed out to the jury that highly experienced surgeons were available only 90 miles away, but she was not informed of this and not offered a referral.

Daniel L. Icenogle, MD, JD

Dr. Kokemoor denied having suggested that the condition was urgent. Moreover, he denied having made the comparison to appendectomies and tonsillectomies. Finally, he claimed to have told her the risk of surgery on aneurysms was 2% overall, but that the location of this one made that risk somewhat higher, although he did not quantify how much greater.

The jury found for Mrs. Johnson that Dr. Kokemoor failed to adequately inform her of the risks presented by the proposed surgery. The jury also held that a reasonable person would have refused to have the surgery done by Dr. Kokemoor

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if fully informed. Dr. Kokemoor appealed the decision of the trial court to allow the testimony about the experience issue and the lack of a referral, claiming it was not material and could only serve to prejudice the jury against him. The court of appeals disagreed, holding that the introduction of evidence about his experience with that type of surgery and the relative risk of having more or less experienced physicians perform the surgery was proper. However, the court agreed with him that evidence about Dr. Kokemoor's failure to refer to more experienced surgeons was not relevant to the informed consent claim. In addition, the court held that the introduction of the referral issue prejudiced the jury by allowing the jury to conclude that Dr. Kokemoor performed the surgery negligently simply because he was less experienced even though negligence was not an issue before the jury. Therefore, the court ordered a new trial. Both parties then appealed to the Supreme Court.

The Supreme Court held that all three items of evidence: 1) information about Dr. Kokemoor's experience with this type of procedure; 2) information about the relative risks of the procedure when done by more or less experienced physicians; and 3) information about access to more experienced physicians and the decision to not refer Mrs. Johnson, were material to the case. More importantly, the court held that information of this type is a necessary component of informed consent in the state of Wisconsin -- sometimes.

The Court's Reasoning

The court relied on state statute and several past cases interpreting the duty of informed consent.

In order for a patient to be able to make a truly informed decision about health matters confronting him or her, all material information must be revealed to the patient. The past cases defined "material" as all information about the risks of treatment, alternative treatments available and the risks of declining treatment.[3]

Similarly, the Wisconsin Supreme Court has defined "material" to include an assessment of the gravity of the situation, the probabilities of success and any alternative treatments or procedures if they are reasonably appropriate. All this is necessary so that the patient has the information reasonably necessary to make an informed decision about his or her health care.[4]

Repeatedly, the court has emphasized that what is necessary to the informed consent process is variable by the situation and cannot be strictly defined. The court has also made clear, in a 1995 case, that the questions about what information is material to the decision about treatment applies equally when making decisions about diagnostic options.[5]

What the Kokemoor case presented was the opportunity for the court to address issues related to the specific physician which may be considered material to the informed decision-making process. There were three separate questions confronting the court, and each will be discussed separately.

Physician Inexperience

Dr. Kokemoor argued that when the trial court allowed testimony about his surgical experience, it allowed the jury to be confused into thinking that if he did not perform to the level of the most experienced surgeons, he performed negligently, even though negligence was not an issue at the trial. Instead, he argued that informed consent should only require information about the risks associated with a particular procedure, not the risks associated with a particular surgeon performing a particular procedure. The Supreme Court disagreed, maintaining that what must be disclosed is contingent on what a reasonable person would want to know in the particular setting. Therefore, if the plaintiff could reasonably claim that the relative inexperience of the treating physician, had she only known it, would have led her to seek care elsewhere, trial court could allow testimony that the information should have been discussed with the patient.

If the court had limited its discussion of inexperience to any increased risk associated with it, one could understand the basis for finding it a material issue when obtaining consent. Although, as will be discussed, the use of risk data does present some problems, it would have been logical for the court to have tied the experience and the risk question together by requiring discussion of the inexperience of the physician if it presented a documented risk for the patient. Although the materiality of inexperience in this case was due to the risk associated with it, the court separated the question of inexperience from that of risk. This leaves open the possibility that in another situation a physician must discuss her experience with a procedure even if there is no increased risk associated with inexperience. All that must be true is that the patient is capable of producing evidence a reasonable person in her position would have chosen to seek care elsewhere had she only known of the inexperience. The court gives no guidance as to when physicians should understand that inexperience is a material issue that a reasonable person should be informed of, despite the fact a reasonable person standard is meant to be an objective one and amenable to definition by a court. As a result, the court has created a duty for physicians but is unhelpful in defining the parameters and the limits of that duty.

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Comparative Risk

The court held that when there is evidence in the medical literature that the morbidity and mortality statistics for a procedure vary by the physician performing the procedure, that fact must be revealed. While this may appear appropriate conceptually, it presents some complications for the individual physician in implementation.

First, the court conflates aggregate data with individual data. Initially, the court speaks of the aggregate data on the risk associated with all physicians of a certain degree of experience performing a procedure, requiring that if that data indicates a significantly higher (undefined) risk for a procedure, that fact must be revealed. The court then refers to "provider-specific" data, referencing articles that discuss whether individual physician outcome data should be revealed to patients. The court's confusion of the two makes one uncertain if the court intends both to be revealed, although the logic of the opinion is that both types of data are fair game.

Second, if the court wishes that aggregate data be revealed, the court is ignoring the fact that the use of such data fails to allow one to accurately predict the performance of any particular physician. Half of any group of physicians will perform better than the aggregate data indicates and some may perform better than some members of another group with better aggregate data. While on average, the use of such data, if accurate, will allow for the selection of the "better" group, there remains the potential for significant inaccuracies on an individual basis.

Third, the court presses for the discussion of provider-specific data. Although the court cites articles that consider the many problems in the use of provider-specific outcome data, there is no specific discussion by the court of the failings of such data. As those who are working to make provider-specific data a useful tool in risk management and managed care settings are discovering, such data is rife with selection bias created by varying patient populations and the difficulties in accurately defining and measuring outcomes.

Fourth, the court, perhaps in recognition of some of the difficulties in outcome data, does state that this decision should not be interpreted to mean that physicians must always provide comparative risk evidence in statistical terms. Whether statistics are material to the patient's decision and sufficiently reliable to be non-prejudicial is to be decided on a case-by-case basis. Again, there was no instruction from the court. In this particular case, statistical information was admissible because Dr. Kokemoor had chosen to provide statistical data, albeit in a misleading fashion. The only requirement for the court is that one fundamental demand be met--that the physician must make clear to the patient in some fashion the true extent of the options and risks facing the patient.

Where does this leave the physician? Must one be aware of both the aggregate data on outcomes for the particular procedure, as well as that for the physician specifically? Which group's aggregate must you be aware of? Is by experience sufficient? What about by specialty or board certification? Is the use of statistics recommended? Again, the court's broad sweep has created many questions that have been left unanswered.

Lack of a Referral

The trial court allowed several of Mrs. Johnson's expert witnesses to testify that, in their opinion, Dr. Kokemoor should have referred her to a more experienced surgeon. The court of appeals held that this evidence should have been excluded, as it had the potential to confuse the jury about negligence versus lack of informed consent. While sympathetic, the Supreme Court disagreed with the court of appeals, holding there was no chance of confusion as there was no negligence claim being made by Mrs. Johnson. This makes one suspect that if a plaintiff was making both a negligence claim and one of a lack of informed consent this type of testimony would not be allowed.

Regardless, in terms of informed consent, the court allowed the testimony for two reasons. First, the informed consent law in Wisconsin requires the disclosure of all information similar physicians would disclose in a similar situation. As the testimony of several physicians was they would have discussed the referral, the court held that the mention of making such a referral would be material to the informed consent process and should have been mentioned by Dr. Kokemoor.

Second, the court held that the information about a referral tied into the issue of risk. While claiming to not have created a duty to refer in the state of Wisconsin with this opinion, the court then held that, if comparative risk data is material to the informed consent decision—that is, there is a significantly lower risk if the procedure is performed by another physician—a referral is "no more than a modest and logical next step."

But is an actual referral necessary, or is it enough to inform the patient that more experienced physicians exist at another site? Although writing several times that the inexperienced physician must refer, the court also wrote that the trial court properly allowed testimony that a physician in good standing would make the patient "aware of the alternative of lower risk surgery with a different, more experienced surgeon in a better-equipped facility." Is telling a

patient about facilities with more experienced physicians sufficient or is an offer of referral required? Is an actual referral required? What if the patient refuses the referral? What if the payer does not approve the referral?

Conclusion

It is unfortunate that the court has taken what is admitted by the plaintiff to have been an extremely unusual situation and spoken so broadly on informed consent doctrine. What we as physicians are left with is significant uncertainty. Unless the legislature acts, it will take further court opinions to further define what has been laid down in this case. Unfortunately, that may require other physicians to face a court and a jury as the result of well-intentioned misinterpretation of this uncertainty.

In the meanwhile, the court has instructed us that informed consent is a concept without rigid form, one that requires careful consideration of the individual patient, the circumstance and the individual physician. The court has placed clear emphasis on protecting the individual patient's autonomy. In addition to a full and accurate discussion of the risks presented by the current medical situation, the risks and benefits of treatment and the alternatives available, the decision requires physicians be aware of and communicate, at least in general terms, the outcome data both for themselves and for their peers in terms of experience and, perhaps, training. A referral may be required in fact situations similar to this particular case, but the limits on when a court will see a referral as a "modest and logical next step" is unclear.

Notes

1. Northern Securities Co. v. U.S., 193 U.S. 197, 400, 24 S.Ct. 436, 48 L.Ed. 679 (1904).
2. 199 Wis.2d 615, 545 N.W.2d 495 (1996).
3. For a more complete discussion, the reader is directed to Weisbard, "Informed Consent: The Law's Uneasy Compromise with Ethical Theory," 65 Nebraska Law Review 749-67 (1986).
4. Scaria v. St. Paul Fire & Marine Insurance Co., 68 Wis, 2d, 1, 11, 227 N.W.2d 647 (1975).
5. Martin v. Richards, 192 Wis.2d 156, 531 N.W.2d 70 (1995). The case involved the decision to not transport a patient to another hospital that had a CT scanner, but to keep the patient at the local hospital. The parents were not informed of the possibility of a CT or its role in the evaluation of a head injury.❖

Informed Consent: Advice from the Trenches

Steven J. Caulum, JD, Madison

Following is information designed to help guide your informed consent discussions with your patients.

- Risk information that must be disclosed to obtain a patient's informed consent to a procedure is that which would be "material" to a prudent patient's decision.

  Material information which demands communication from physician to patient is all information regarding the inherent and potential significant hazards of the proposed treatment; alternatives to that treatment, if any exist; and the results likely if the patient remain untreated.

  The scope of disclosure, say the courts, "defies simple definition." It is rooted in the patient's need to know, in order that an intelligent and rational decision can be made to accept or reject the proposed treatment.

- There is no "bright line rule" requiring disclosure of one's experience, gratuitously, in order to obtain the informed consent of a patient to a proposed procedure, certainly in the absence of reliable data that the predictable outcome from such procedure would likely be substantially worse in your hands, than it would be in the hands of some other provider.

- There is no "bright line rule" that a physician must provide comparative risk information in order to obtain the informed consent of a patient to a procedure.

- It should be a rare situation where (as in Kokemoor) the vast body of literature and expert opinion will agree that the experience of the surgeon will substantially impact the morbidity/mortality risk of a proposed procedure. This is the predicate upon which disclosure of experience/offer to refer became "informed consent" issues in Kokemoor.

- If one provides comparative risk information to a patient, the data should be accurate, and the statements made documented.

- If a patient inquires as to your experience with a procedure, the response should be accurate, as well as documented.

- In the vast majority of situations, the issues present in the Kokemoor case will be utterly irrelevant to obtaining an informed consent of a patient to a proposed procedure.❖

Steven Caulum, JD, is a partner with Bell, Metzner, Gierhart & Moore, S.C., Madison. For the past 16 years, Mr. Caulum has concentrated almost 100% of his time in health care related defense work.

Note from the SMS Office of General Counsel: Physicians should be aware that breach of the duty of informed consent continues to be a "hot issue" for plaintiff's attorneys. On July 8, 1997, the Court of Appeals handed down Metzler v. Dichraff. In this unpublished decision, the court reversed the trial court's grant of summary judgment to the defendant on the issue of breach of informed consent. In the case, a dentist failed to advise his patient that her surgery could have been obtained by an oral surgeon. The court held whether the availability of an oral surgeon to perform surgery would be material to a patient's exercise of intelligent and informed consent is a question of fact for the jury, and specifically referred to the Kokemoor decision in its opinion. For more information, contact **Kalisa Barratt, JD, Assistant General Counsel, at SMS ext. 233 or via e-mail at: KALISAB@smswi.org.**

Your Financial Fitness
Debit Cards vs. Credit Cards

Michael Dolan, CLU, ChFC, Madison

DEBIT CARDS LOOK like credit cards but are very different. These pieces of plastic, sometimes called "check" or "cash" cards, debit your bank account when you use them to make a purchase. Because there's an immediate transfer of funds, there are never interest or finance charges. In addition, you can't spend more than you have in your account.

Debit cards offer convenience. When you carry a debit card, also called an "enhanced ATM card," you don't have to carry large amounts of cash and run the risk of theft, or go through the hassle of having a check accepted. This is particularly helpful when you are traveling, because out-of-state checks are often not accepted at all. Privacy is enhanced because you don't have to provide personal information like you do when using checks.

Debit cards also offer a way to track spending, because itemized purchases show up on your monthly bank statement. Use a card for day-to-day outlays on things like gasoline, groceries and dinners out, and you'll have a ready-made budgeting tool. Of course, you should enter all your transactions in your checkbook and keep receipts until you've balanced your checkbook at the end of the month. Keeping track of card transactions is especially important if you write a lot of checks. You don't want to end up overdrawing your account.

Debit cards work in two different ways. In an "on-line" system, you enter a personal identification number (PIN) just as you do when using an ATM. The amount is then immediately debited from your checking account. With an "off-line" system, you sign a slip much like a credit card slip, and the money is debited within a day or two.

But there may be disadvantages to debit cards as well. Before you agree to accept a debit card from your bank or credit union, find out what fees you'll be asked to pay. Some cards are free, but some banks impose monthly fees while others charge a fee each time you use the card.

You should also be aware of the protection that federal law provides against unauthorized use of your card. If a debit card is lost or stolen, you are liable for no more than $50 so long as you report the loss or theft to your financial institution within two business days. If you wait longer, you may lose up to $500.

Similarly, if you notice unauthorized charges on your bank statement, your liability is limited to $50 if you notify the institution within 60 days of the date the statement was mailed. After that, you could lose your entire bank account along with any overdraft line of credit.

And, because using your debit card to make a purchase is much like using cash, you don't have as much protection as you do when you use a credit card. With a credit card, you can withhold payment while a dispute about a product or service is being resolved. With a debit card, if a product or service turns out to be defective, you must ask the merchant for a refund. Always check refund policies before you buy. ❖

Michael Dolan, CLU, ChFC

Dolan is president and chief operating office of SMS Insurance Services and a member of the National Association of Life Underwriters. He can be reached at SMS ext. 550, or via e-mail at: MIKED@smswi.org.

Obituaries

Berry, James S., MD, 61, an orthopedic surgeon from Beaver Dam, died June 7, 1997. He earned his medical degree and completed an orthopedic surgical residency at St. Louis University, St. Louis, MO in 1970. He began a medical practice as a partner in the Freeport Clinic in Freeport, Ill from 1970-1978 and he was a member of the Board of Directors serving as Chairman of the Board of Directors for the clinic. Doctor Berry opened a solo orthopedic practice in Beaver Dam in 1978 from which he retired in 1995. He was chief of surgery for the Beaver Dam Community Hospitals from 1982-1984 and 1989-1991; chief of staff, Beaver Dam Community Hospitals from 1984-1986; a member of the board of directors, Beaver Dam Community Hospitals from 1984-1986, and member of the executive committee, Beaver Dam Community Hospitals staff 1983-1995. Doctor Berry was president of the Dodge County Medical Society from 1980-1982. He was president of the Beaver Dam Physicians Association from 1986-1989. He was also on staff of Waupun and Columbus hospitals.

Doctor Berry was board certified in orthopedics in 1974. He was a member of the American Academy of Orthopedic Surgeons, Mid-America Orthopedic Association, International Intradiscal Therapy Society, International Society for Minimal Intervention in Spinal Surgery, American Medical Association, State Medical Society of Wisconsin, and the American Board of Medical Specialists. He is survived by his wife, Gloria; five children, Lisa Berry of Bloomington, Ill; Gina Berry of Ventura, Calif; Elizabeth Courtney of Redondo Beach, Calif; Brian Courtney of Melbourne, Australia; John Courtney of Beaver Dam; and one grandchild.

Tributes to loved ones can help others

The memorial program of the SMS Foundation offers physicians a unique opportunity to provide a living memorial to a loved one or friend through a gift to the Foundation. A memorial contribution can provide financial aid to a needy medical student, help stimulate research on behalf of the public health or aid in the preservation of Wisconsin's medical history. When a memorial gift is made to the Foundation, the deceased person's family receives a special card with the name of the donor. For more information, contact Julie Hein, Executive Director, SMS Foundation at ext. 323 or via e-mail at: JULIEH@smswi.org. ❖

Cherkasky, Simon, MD, 83, general practitioner and surgeon from Kaukauna, died May 30, 1997. Doctor Cherkasky earned his medical degree from the University of Wisconsin Medical School and the University of Arkansas School of Medicine graduating in 1941. He completed his internship at Mount Sinai Hospital in Milwaukee and his residency at Luther Hospital in Eau Claire. He was a captain in the US Army Air Corps from 1944 to 1946 and served during World War II as a surgeon in a military hospital in Okinawa. Following his discharge from the service, Dr Cherkasky served as a medical examiner for the Wisconsin National Guard and in 1976 he received an award for outstanding service. He opened a general medical practice in Kaukauna in the late 1940s. Doctor Cherkasky served as both chief of staff and chief of surgery at Kaukauna Community Hospital and was on active staff at Appleton Medical Center and St. Elizabeth Hospital. He was medical director for a number of Fox Valley paper mills. He was a member of the State Medical Society, American Medical Association, and the state chapter of the American College of Occupational Medicine. In 1991, he was honored by the State Medical Society and inducted into the Fifty Year Club. Doctor Cherkasky retired in 1993. He is survived by his wife Eva; three children, Belle Agronin, Stamford, Conn; Lynn Cherkasky-Davis, Chicago, Ill; Alan Cherkasky, MD, Kaukauna; eight grandchildren and three great grandchildren.

Ganser, Leonard James, MD, 77, a psychiatrist from Madison, died June 20, 1997. He earned his medical degree from the University of Wisconsin Medical School in 1946, and completed a residency at Johns Hopkins Hospital in 1953. He was a commissioned officer in the US Public Health service from 1947-1952. He served Wisconsin in mental health and human services for over 30 years, from 1953-1985. Doctor Ganser was Superintendent of the Wisconsin Diagnostic Center from 1955-1960; Administrator of the Division of Mental Hygiene (community services), 1960-1979; Chief of Clinical Research and Training 1979-1985. He was clinical professor of Psychiatry at the University of Wisconsin Medical School, 1972-1997. Doctor Ganser was a member of the American Board of Psychiatry and Neurology, American Psychiatric Association (life fellow), Wisconsin Psychiatric Association (president 1959-1960), State Medical Society, Dane

County Medical Society, American College of Psychiatrists (charter fellow), National Association of State Mental Health Program Directors (president 1967-1969). He served on the Board of Directors of DePaul Rehabilitation Hospital, Milwaukee. He influenced many national and state programs in the fields of alcohol and drug abuse, mental health, developmental disabilities and social services. Doctor Ganser was a member of the Wisconsin Council on Developmental Disabilities (chairman 1982-1984), a consultant of the National Institute of Mental Health and the National Health Care Financing Administration. He was honored by two past Governors for outstanding contributions in the development of community mental health programs and services for persons with developmental disabilities. Doctor Ganser is survived by his wife, Betty; five children, Judy Ganser of Indianapolis, Ind; Nancy Nichols of Madison; Dave Ganser of Atlanta, Ga; Jim Ganser of St Louis, Mo; John Ganser of Janesville; and three grandchildren.

Nadeau, George, MD, 78, an ophthalmologist and otolaryngologist from Green Bay, died May 20, 1997. Doctor Nadeau earned his medical degree from Northwestern Medical School in 1944, and completed residencies at Wesley Memorial Hospital and at Passavant Memorial Hospital. Doctor Nadeau received additional training at the University of Illinois Research Hospital and the Illinois Eye and Ear Infirmary, Chicago. He was a Captain in the US Army during World War II. Doctor Nadeau practiced Eye, Ear, Nose and Throat medicine in Green Bay from 1949-1982. He was in partnership with his father from 1949-1977. Doctor Nadeau was a diplomate of the American Board of Ophthalmology, a fellow of the American College of Surgeons, a fellow of the American Academy of Ophthalmology and Otolaryngology, a member of the Chicago Ophthalmological Society, Brown County Medical Society (past president 1958), State Medical Society of Wisconsin, the American Medical Association, Wisconsin-Upper Michigan Oto-Ophthalmological Society (past president 1959) and a Charter Member of the National Medical Foundation for Eye Care. He is survived by his wife, Marynelle; four children, Cece Nadeau; E.G. Nadeau; Dennie Fisher; Cammie Rice; and seven grandchildren.

Stuessy, Milton F., MD, 67, general practitioner from Platteville, died April 19, 1997. Doctor Stuessy earned his medical degree from the University of Wisconsin Medical School, and completed his internship at Memorial Hospital of South Bend, Ind. Doctor Stuessy served in the US Army Medical Corps at Ft Benning, Ga., and was chief of staff and medical director at the Southwest Health Center. He is survived by his wife, Patricia; three children, Anne Stuessy of Bartlett, Ill; Margi Stuessy of Minnetonka, Minn; and Mary Peters of Carol Stream, Ill; two grandchildren; his mother, Susan Stuessy of Platteville; and a sister, Janet Plourde of Platteville.

Torhorst, James Bruce, MD, 51, an obstetrician and gynecologist from Monona, died June 22, 1997. Doctor Torhorst earned his medical degree from the University of Wisconsin, Madison and completed an internship and residency there as well. Doctor Torhorst operated a large and successful independent practice in Madison and more recently at Divine Savior Hospital in Portage. He served as a faculty member at the University of Wisconsin Medical School. During his 24 years of medical practice, he delivered over 2,000 infants. In addition to his excellence as a physician, he was a close friend to many of his patients. He is survived by his wife, Cheryl; three children, J.D., Brooke and Brie; his mother Janet; brothers Bill of Oregon, Wis; Richard of Lake Geneva, Tom of Racine; Pat of Burlington; and his sister, Nancy Mabson of Burlington. ❖

County Society News

Juneau. The Juneau County Medical Society approved membership for William Marculis, DO and Jozef Tryzno, MD.

Marathon. Firendra K. Misra, MD was approved for membership in the Marathon County Medical Society.

Milwaukee. The Medical Society of Milwaukee County approved membership for the following: David S. Abelson, MD; Hector Lopez, MD; Alan W. Babcock, MD; Henry J. Bradley, MD; Michael A. Braun, MD; Peter Burrell Burns, MD; Keith D. Epperson, MD; Apichai Jarenwattananon, MD; Yong W. Kim, MD; Anne E. Krutchen, MD; Michael P. Muldoon, MD; Robert J. Starshak, MD; Primo R. Tamayo, MD; Taoufik Al-Saadi, MD; Mark W. Collar, MD; Rekha Pai Kini, MD; Nancy A. Krasnow, MD; Thomas G. Milner, MD; Pradeep Magaraju, MD; Elisabeth A. Pott-Grinstein, MD; Joseph L. Rhoades, MD; Andrew P. Swietlik, MD; David B. Sze, MD; Ramin Tayyanipour, MD; Melissa Chudnow; Amy Emmer; Jill Gronowski; John Hung; John J. Kim; Greg Orshansky; Mike Rudisile; Rebecca Shobe; James H. Ting; Michael Weisgerber.

Sauk. The following physicians were approved for membership in the Sauk County Medical Society: Robert E. Schmus, MD; Theresa I. Wang, MD.

Shawano. Kevin R. Leach MD, has been approved for membership in the Shawano County Medical Society.

Waukesha. The Waukesha County Medical Society approved membership for the following physicians: Daniel T. Gerber, MD; Mitchell A. Klein, MD; Keith MacGaffey, MD; Malti M. Patel, MD; Thomas R. Stoiber, MD.

Winnebago. The following physicians were approved for membership in the Winnebago County Medical Society: William Groves, MD; Lloyd Hendrix, MD; Mark Westfall, MD. ❖

AMA Awards

The Wisconsin physicians listed below reclently earned AMA Physicians's Recognition Awards. They have distinguished themselves and their profession by their commitment to continuing education, and the SMS offers them its congratulations. The * indicates members of the SMS.

* Aasen, Mark E.
* Benson, Kevin K.
Black, David P.
Boehme, Larry R.
* Bostrom, Paul F.
* Choucair, Ali K.
* Cody, Edward, F.
* Cooper, Matthew
Diestelmeier, Michael R.
* Donovan, Timothy J.
* Etherton, Gale M.
* Fejer, Szabolcs I.
* Finger, William A.
Hamilton, Karen J.
* Hankey, Terry L.
* Hauke, Gary S.
Herrmann, Anthony A.
* Horan, Doug B.
* Hughes, Timothy E.
Julian Thomas M.
* Kangayappan, Sivakami
* Leitheiser, Gregory J.
* Lleva, Florentino E.
* Marquis, Stephen J.
* Miller William C.
Munas, Falies A.
* Murray, Barbara J.
* Neuman, Carol J.
* Parker, Daniel R.
Pintar, Thomas J.
* Praxel, Theodore A.
* Rokey, Roxann
* Schulz, Douglas L.
* Shockley, Mark S.
* Smith, Ann C.
* Stueland, Dean T.
Stupek, Warren S.
Tyree, Robert F.
* Zondlo, Joespeh G. ❖

Physician Briefs

*Denotes SMS Member

E. Keith Cole, MD,* recently assumed the duties of Chief of Medical Staff at Memorial Hospital of Taylor County. Doctor Cole's duties include acting as liaison between the medical staff and Memorial Hospital's board of directors, and representing the medical staff as a voting member of the hospital board. He replaces Doctor Michael Haase who served as Chief of Medical Staff for the past nine years.

Hulon Crayton, MD,* a rheumatologist with All Saints Medical Group in Racine, has been elected a Fellow of the American College of Physicians.

Donna Daufenbach, MD,*an ophthalmologist, recently joined the Spectrum Eye Center of Whitewater. Doctor Daufenbach earned her medical degree from the Medical College of Wisconsin. She completed an internship at St Luke's Medical Center in 1992 and completed her Opthalmology residency in 1995 at the Eye Institute, associated with the Medical College of Wisconsin in Milwaukee.

David Drury, MD, an occupational medical specialist, joined Concentra Occupational Medical Centers, Milwaukee. He was previously the medical director of Aurora Occupational Health Services.

Tom Faciszewski, MD,* was inducted as a Fellow of the American Academy of Orthopaedic Surgeons.

Daniel R. B. Fary, MD,* an ophthalmologist, joined the Spectrum Eye Center in Whitewater. Doctor Fary earned his medical degree from Indiana University. He completed an internship which included two years in family practice residency at St. Joseph Hospital in South Bend, Ind. Doctor Fary trained in an ophthalmology residency from 1976 to 1979 at the Indiana University Medical Center in Indianapolis. He is board certified in ophthalmology.

John Frey, MD,* professor and chair of the University of Wisconsin Medical School Department of Family Medicine, has been named president-elect of the Society of Teachers of Family Medicine. With 4,500 members, the society is the largest academic organization in family medicine and is devoted to education scholarship and research. Frey will assume the presidency at the society's annual meeting in May, 1998.

Gregg M. Gaylord, MD,* a radiologist, joined the medical staff of St Nicholas Hospital. Doctor Gaylord earned his medical degree from the University of Cincinnati. He completed his internship at Englewood Hospital, Englewood, NJ; his residency at Albert Einstein College of Medicine/Jacobi Hospital in Bronx, NY and a fellowship in vascular interventional radiology at Emory University Hospital in Atlanta, Ga. Doctor Gaylord is board certified in diagnostic radiology with added board qualifications in vascular and interventional radiology.

David Huante, MD,* an internal medicine specialist, joined the medical staff of Doctors Park Physicians and Southwest Health Center, Platteville. Doctor Huante earned his medical degree from the University of Michigan, Ann Arbor and completed his residency and internship at the Henry Ford Hospital in Detroit.

Thomas Loepfe, MD,* a geriatric medicine specialist will provide geriatric outreach services at the Franciscan Skemp LaCrosse Campus Clinic. Doctor Loepfe earned his medical degree from Mayo Medical School in Rochester, Minn. He completed his residency and geriatrics fellowship at the Mayo Graduate School of Medicine, Rochester, Minn.

Thomas J. McIntee, MD,* a pediatrician, joined the medical staff of Rice Clinic Pediatrics. Doctor McIntee earned his medical degree from Harvard Medical School and completed a pediatric residency and chief residency with the University of Colorado Children's Hospital, Denver. He earned board certification in pediatrics in 1995. Doctor McIntee is a member of the American Academy of Pediatrics, Physicians for Human rights, and has been involved with Physicians for Social Responsibility and Habitat for Humanity.

Daniel Mui, MD,* an internist, joined the medical staff of Columbia Primary Care Physicians, Milwaukee. He has been in private practice for three years.

Douglas R. Palmer, MD,* an orthopedic surgeon, joined the medical staff of Adams County Memorial Hospital. Doctor Palmer earned his medical degree from St. George's University, Grenada, West Indies and the Medical College of Wisconsin, Milwaukee. He completed a five year residency at Cook County Hospital, Chicago.

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Doctor Palmer's primary interest is sports medicine. He is board certified in orthopedic surgery.

Todd A. Rave, MD,* a neurologist, joined the medical staff of Rice Clinic Medical Center. Doctor Rave earned his medical degree from the University of Nebraska Medical Center, Omaha. He completed a fellowship in clinical neurophysiology, achieving special expertise in EMG, EEG, and EPS. Doctor Rave is board certified in neurology.

Kathleen Scanlan, MD,*was presented the Joseph E. Whitley, MD, award, in recognition of the best manuscript presented on a subject related to radiologic education: *"Development of a Reliable and Valid Radiology Faculty Appraisal Instrument Using Critical Incident Interviewing."* This award, which included a $1,000 honorarium, also includes publication in the journal *Academic Radiology*.

Victor J. Sobolewski, III, DO, FAOSM, of Whitewater, was inducted as a fellow in primary care sports medicine by the American Osteopathic Academy of Sports Medicine at its recent annual meeting in San Diego, Calif. Doctor Sobolewski is one of approximately 70 physicians honored by this title, the first of its kind in the US. Doctor Sobolewski practices family and sports medicine at the Mercy Whitewater clinic and is on the medical staff at Mercy Hospital in Janesville.

Joseph Tryzno, MD,* has been named a Diplomate of the American Board of Family Practice. Doctor Tryzno, a family practitioner, earned the diplomate status by passing the ABFP's certification examination, an intensive written test of the physician's abilities in pediatrics, internal medicine, surgery, obstetrics, gynecology, psychiatry, prevention, and other aspects of family practice.

James Wallace, MD,* a family practitioner, joined the medical staff of Nicolet Medical Clinic. Doctor Wallace earned his medical degree from Michigan State University Medical School. He completed his internship at Muskegon General Hospital. Doctor Wallace is board certified in family practice. He has been practicing medicine for the past 10 years at the Oconto Primary Care Clinic, Oconto.

Steve Weber, DO,* a family practitioner, joined the medical staff of Antigo Medical Building. Doctor Weber earned his medical degree from the Chicago College of Osteopathic Medicine and completed his residency at Brentwood Hospital in Cleveland. Doctor Weber's special interests are in obstetrics, outpatient surgery and sports medicine.

J. Frank Wilson, MD,* professor and chair of radiation oncology and director of the Cancer Center of the Medical College of Wisconsin received the Distinguished Service Award, the Medical College's highest honer.

Bonnie Lee Wirfs, MD,* a medical director at the Kenosha Care Center has been named a certified medical diretor for long-term care facility by the American Medical Directors Certification Program. The program recognizes physicians with competence in medical direction and in clinical medicine in long-term care. Doctor Wirfs is the first physician to receive the certification in Kenosha.

James E. Youker, MD,* professor and chairman of the department of radiology at the Medical College of Wisconsin, received the Gold Medal of the Association of University Radiologists at its 45th annual meeting in Dallas. The Gold Medal is the group's highest award and one of the most prestigious honors for those who teach and practice radiology.

Doctor Youker practices at Foredtert Memorial Luther Hospital, where his clinical specialties include diagnostic imaging for cancer and heart disease. His research has contributed better ways to detect colon polyps and breast cancer, and he has done considerable research in the use of angiography for diagnosis of heart disease. He is also one of three editors of the widely used radiology text, *Oncologic Imaging*.❖

Wisconsin Medical Journal
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Manuscripts are considered with the understanding that they have not been published previously and are not under consideration by another publication.

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The cover letter must also designate one author as correspondent and provide a complete address and telephone and fax numbers. All coauthors should have contributed to the study and manuscript preparation. They should be thoroughly familiar with the substance of the final manuscript and be able to defend its conclusions. Brief biographical information is needed for each author.

The *Journal* expects authors to disclose any commercial associations that might pose a conflict of interest in connection with the submitted article. All funding sources supporting the work should be routinely acknowledged on the title pages, as should all institutional or corporate affiliations of the authors.

Editing

All manuscripts will be edited by the *Journal* staff for clarity, organization, grammar, spelling, and punctuation, and in accordance with AMA style (*AMA Manual of Style*, 8th ed, and *AMA Manual for Authors and Editors*). Suggestions for titles are welcome, but are subject to the constraints of clarity, space, grammar and style.

The author will be asked to review a galley proof prior to publication to verify statements of fact. Galley proofs are for correcting minor and typographical errors only. Revisions in the paper are not possible at this stage and should have been made prior to final acceptance of the paper. The authors are responsible for all statements made in their work, including any changes made by the editors and authorized by the corresponding author.

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- Submit papers to: *Wisconsin Medical Journal*, PO Box 1109, Madison, WI 53701; Ph: 608-257-6781 or 1-800-362-9080; FAX: 608-283-5401.
- Computer-generated or typed manuscripts must be submitted in triplicate (one original, two photocopies). Type on one side only of standard-sized white bond paper, using 1-inch margins. Double-space throughout. Electronic submissions are also possible. A printed copy must accompany all disk and electronic submissions.
- Organization for scientific papers. The following outline is recommended:

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  Results—Provide results in the test, tables or illustrations. If tables or illustrations are used, emphasize or summarize only the most important observations in the text.

  Discussion—Discuss the conclusions that follow from the results, as well as their limitations and relations to other studies. Show how the conclusions relate to the purpose of the study. Recommendations, when appropriate, may be included.

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Continued on next page

Continued from preceding page

names may be inserted in parentheses.

- Units of measure are to be provided in metric, followed by International System units (SI) in parentheses.
- Provide each author's full name and highest academic degree in the byline. If an author holds two doctoral degrees (eg, MD and PhD, or MD and DDS), either or both may be used, according to the author's preference. Honorary American designations (eg FACP or FACS) are omitted. If the author holds a doctorate, master's and bachelor's degrees are omitted. Courtesy titles (eg, Mr, Mrs, Ms) are omitted from bylines and text.

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Authors are encouraged to submit photos, graphs and charts when such illustrations will aid in the readers' understanding of the article. If color illustrations, suitable for use on the *WMJ* cover are available, the author should notify the *WMJ* office when the paper is submitted. Use of art submitted as cover illustrations is not guaranteed.

Revisions

It is rare that a paper is ever accepted without revision as suggested by the scientific editorial board or *WMJ* editor. When you make revisions to your article, please send 2 hard copies along with an electronic version on an IBM-compatible disk so we will be able to move forward with publication in a timely manner.

Review process

Each scientific manuscript is reviewed by the medical editor and the members of the editorial board. The opinions of outside consultants may be sought at the medical editor's discretion. The medical editor has the final decision as to whether a scientific paper will be published.

Socioeconomic manuscripts are reviewed by the SMS senior staff and legal counsel. The SMS executive vice president has the final decision as to whether a socioeconomic paper is published.

Editorials, letters, and soundings are reviewed by the medical editor, SMS senior staff, and legal counsel. Authorship of editorials is reserved for members of the *WMJ* editorial board, editorial associates, and SMS elected officials. Editorials are signed by the authors, are the authors' opinions, and do not necessarily reflect the policies of the SMS. Letters are signed by the authors, are the authors' opinions, and do not necessarily reflect the policies of the SMS. Authorship of letters is open to the public, but letters are limited to 500 words and subject to editing for length, clarity and style.

Conference Reports

The Editorial Board will be pleased to consider publication of brief conference reports. The following ground rules will apply:

1. Only reports of single-topic conferences held in Wisconsin will be considered.
2. The topic of the conference should have interest for a wide group of Wisconsin physicians who would have liked to attend, but the priority was not high enough, e.g., Alzheimer's Disease, AIDS.
3. The author should be the conference chair (or designee).
4. The report should focus primarily on what is "new and important" that can and should be used by the reader.
5. BRIEF is defined as six pages, double-spaced typing. In addition, the author may provide a one-page, double-spaced background statement as to why the content of the report is important for Wisconsin physicians.
6. The conference brochure should accompany the report. It will not be published.

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MADISON, WISCONSIN. Dean Medical Center a 385 physician private multi-specialty group is actively recruiting one full-time and one part-time BE/BC internist to join our Dean Clinic (our main building) on Fish Hatchery Road in Madison. The Fish Hatchery Road, Middleton and our West Madison Clinic share a call schedule which is approximately a one in ten call schedule. A two year guaranteed salary plus incentive and benefits is being offered for this position. For more information contact Scott M. Lindblom, Medical Staff Recruiter, Dean Medical Center, 1808 West Beltline Highway, Madison, Wisconsin 53715, work (608) 250-1550, home (608) 833-7985 or fax (608) 250-1441. 8-10/97

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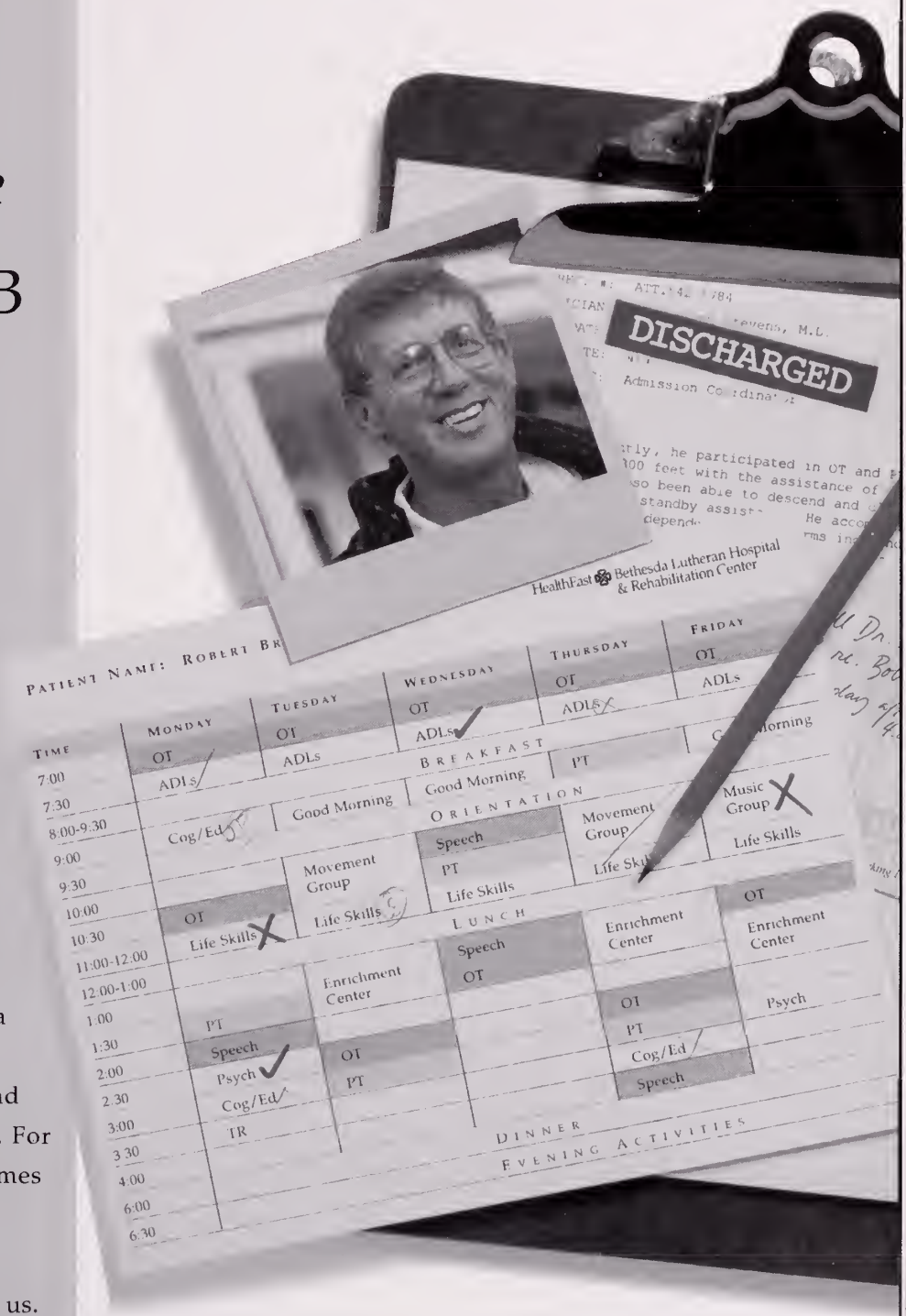

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WMJ

September 1997

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Judith D. Burke

Editor's Column

Women in Medicine: Breaking New Ground

In 1990, the AMA dedicated September as Women in Medicine Month to celebrate the contributions of women in medicine and promote opportunities for their greater participation in organized medicine.

The 1997 theme, *"Women in Medicine: Breaking New Ground,"* highlights the accomplishments of women in the profession and their increased numerical growth and significance in the workplace.

Women entering the medical field fueled the growth of physician supply. Since 1970, the number of female physicians has skyrocketed growing 425%, while the number of male physicians has grown 79%. Today, there are almost 150,000 women physicians comprising 21% of all U.S. physicians.

In this month's President's Page column, *Women Physicians: An Education* (**page 4**), SMS President Sandra L. Osborn, MD, provides an eye-opening account of the trials and tribulations women practitioners had to endure just to achieve the same education and credentials as their male counterparts. Guest Editorials offer a woman's perspective on the medical profession (Patricia Barwig, MD, on *The Winds of Change in Medicine*, **page 21**) and a man's perspective on the loss of a pregnancy (*What's in a Name*, **page 20**, by Russell G. Robertson, MD).

The growth of female physicians in Wisconsin reflects the national averages: women physician SMS members account for roughly 16% of total membership. Jeremy Pittenger, contributing editor, spoke with several "pioneers" in the profession: women who were special because they entered a traditionally male field. These physicians, who consciously decided to dedicate their lives to helping others, their patients, ended up helping today's female physicians and medical students, as well. They forged a path that others tread without giving a second thought. *A Woman's Place in Medical History* begins on **page 24**.

Wisconsin is unique in the numbers of women who have catapulted to leadership positions in organized medicine. Marc Kennedy takes a look at the ways women have penetrated the market and how being a physician *and* a woman have impacted, and complicated lives. His article, *Profiles of Wisconsin Women in Medicine* begins on **page 29**; he spoke with several key SMS women physician leaders and shares their personal challenges and triumphs with you.

WMJ: Breaking New Ground

I am very pleased that this edition heralds the launch of the newly-redesigned *WMJ*, which is based on feedback and suggestions we received from you, our readers. magazine more dynamic, relevant and reader friendly.

You'll notice several key changes with layout: the Physician Briefs, now called Who's in the News, has moved to the front of the publication along with the Obituaries, AMA Awards and CMS News which will be expanded to provide county society meetings and events information. The scientific papers are grouped in a separate, stand-alone section as the Wisconsin Medical Journal (see **page 37**). The back section of the book will include regular columns with information pertaining to practice management, such as the legal column, *From the Office of General Counsel*, technology column and financial column, *Your Financial Fitness*. The regular monthly columns will also feature the same identifying icons each month, so you can easily flip to the sections that most interest you.

The long-overdue face lift has been in the planning and development stages for many months and is the culmination of hard work and determination by many individuals. We owe the vision of the redesign to Tom Adams, former SMS EVP and B-L Pellicore, former VP Communications, both of whom have moved on to other challenges, but not without leaving an indelible impression on the SMS and this journal. We owe the commitment to the vision to our current EVP, John Patchett, JD, and senior SMS staff who provided valuable input along the way. We owe the design itself to Randy Gunter of Gunter Communications, and the fact that it came to fruition to our Desktop Publisher, Vicki Meyer, and our prepress guru, Eric Landmann of TypeTronics.

This is your journal and we welcome your feedback on content, the redesign, suggestions for themes or ideas for articles. You can reach us by phone toll-free at: (800) 362-9080 or (608) 257-6781; by fax: (608) 283-5401; or by e-mail at: WMJ@smswi.org. Highlights of each issue are available on-line at: http://www.wismed.com. Thank you for your continued *WMJ* support and SMS membership.

Judith D. Burke, managing editor and the *WMJ* staff

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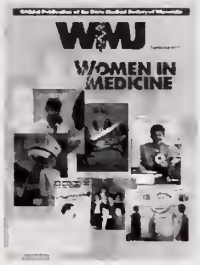

COVER THEME:

WOMEN IN MEDICINE

In 1990, the AMA dedicated September as Women in Medicine Month to celebrate the contributions of women in medicine and promote opportunities for their greater participation in organized medicine.

The 1997 theme, "Women in Medicine: Breaking New Ground," highlights the accomplishments of women in the profession and their increased numerical growth and significance in the workplace.

Cover photos are from WMJ archives and feature former SMS Presidents, Pauline Jackson, MD and Marcia Richards, MD, current President Sandra L. Osborn, MD, along with other SMS women in medicine. Design by Eric Landmann of TypeTronics.

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President's Page

Women Physicians: An Education

by Sandra L. Osborn, MD, President

Women have been highly regarded as comforting healers for a long, long time; there probably were female practitioners in the world of ancient Greece and Egypt, and in pre-Columbian America. In the Middle Ages, the chief medical activities of women were as midwives, but there were also skillful female doctors practicing secretly or openly. In Christian religious orders women treated the sick throughout the medieval period. The activities of women in medicine throughout history often were undertaken with disapproval and, at times, outright antagonism from the populace -- not only from male physicians.

During most of the world's history, licensure was not required, so it was principally public acceptance that would enable someone to perform medical functions regularly. When in the fourteenth century examinations began to be required for anyone to practice medicine, both sexes were theoretically equal. At the end of the fourteenth century in Germany, there were licensed female practitioners. In the fifteenth century the number had increased markedly, but only because the emperor had hired women to treat the indigent sick. Although the advance of women into medicine was inexorable, it was slow.

In one field alone throughout history women were always accepted and even preferred: midwifery. Women continued to find it nearly impossible to be accepted for training and practice as full-fledged doctors, except perhaps in Italy where women had received medical education for centuries and even occupied prestigious university chairs.

Summarily turned down by a number of schools, Miss Blackwell persisted until she gained admission to a small school in upstate New York, the Geneva College of Medicine.

As in Europe, American medical schools were closed to females. In colonial days, although many women were midwives, nurses, and apothecaries, some actually practiced medicine. There were a few others, but the outstanding breakthrough for a woman was achieved by Elizabeth Blackwell (1821-1910). Summarily turned down by a number of schools, Miss Blackwell persisted until she gained admission to a small school in upstate New York, the Geneva College of Medicine. Throughout the two years of her schooling (the standard course at the time) she applied herself so diligently that she passed the qualifying examinations with the highest average. In 1849, along with the other members of the graduating class, she received her MD degree.

Of course even with that, the battle was hardly begun. Acceptance by the profession and the public was still far off. She studied further and based herself in New York City, where she established a clinic that became the New York Dispensary for Poor Women and Children.

Dr. Blackwell's sister Emily had similar difficulties. Although she was able to enter Rush Medical College in

Chicago, the Illinois State Medical Society prevented her from continuing. Nevertheless, she was able to finish a second year of training at the Cleveland Medical College.

The Blackwell sisters and a woman physician from Berlin, Germany, together founded the New York Infirmary for Women and Children in 1857. This institution gave the few women who had managed to enter the profession an opportunity to obtain the additional hospital training so necessary to their attainment of practical skills.

The establishment of the first women's medical school in 1850, the Female Medical College of Pennsylvania (later The Women's Medical College of Pennsylvania) was due in large measure to the efforts of Quaker physicians of Philadelphia.

Women's medical schools flourished in the latter half of the 1800s, and it was not unheard of, 100 years ago, for women physicians to combine the dual demands of career and family. As the century ended, more opportunities for coeducational training unfolded, and women welcomed the attainment of their long-term goal in medical training -- integration. In 1894, women made up at least 10% of the student body at 18 medical schools run by men. And when the Woman's Medical College of the New York Infirmary was absorbed by Cornell University Medical School in 1899, Emily Blackwell, one of the Infirmary's founders, said that Cornell's acceptance of women made "a separate medical school for women unnecessary." A year before Abraham Flexner published his report on medical education in 1910, all but three of these schools had closed.

However, in 1910, more than half the medical schools in America did not accept women. The lack of acceptance persisted; in 1946 the dean of a large medical school in the East admitted to limiting enrollment of women to 6%. The university medical schools were slow and even resistant to permitting females to enter, but by the last decade of the nineteenth century about thirty-five schools had finally withdrawn their objections. Even by the 1960s, women still faced small quotas when trying to enter medical schools. However, despite the quotas and the then small number of women in medicine, women were in the profession to stay.

The New York Infirmary for Women and Children opened in 1857 and gave the few women who had managed to enter the profession an opportunity to obtain the additional hospital training so necessary to their attainment of practical skills.

Wisconsin offered virtually no formal training in medicine until the 1890s. In 1848, the new state's lawmakers called for the creation of a university in Madison comprising four departments: law; medicine; theory and practice of elementary instruction; and science, literature and the arts. Sixty years passed before the University of Wisconsin took advantage of the 1848 law and opened a two-year medical school. The four-year curriculum appeared later.

On February 19, 1841, the Legislative Assembly of the Territory of Wisconsin passed a law permitting the incorporation of county and territorial medical societies, reasoning that "well regulated medical societies have been found to contribute to the advancement of diffusion of true science, and particularly of the healing art." The law required county organizations to have at least five members and to be open to all physicians and surgeons who possessed a diploma "from any incorporated medical college or society."

The Wisconsin State Medical Society, as it was called in 1854, opened its ranks to any "regular physician in good standing."

For decades, society fellowship was limited to white males, even though the association technically had no "test of race, color, or sex." In fact, President John Favill in 1872 offered his "most cordial right hand" to any woman of thorough medical education, and good character, who desires to devote herself to the

practice of medicine. "St. Paul may have ruled her out of the pulpit," he said, "but St. Paul never did say she would not make a good Samaritan." Despite such sentiments, however, no woman joined the state society until 1885, sixteen years after Dr. Laura J. Ross broke the sex barrier of the Milwaukee Medical Society which was created in 1846 by 28 county physicians.

In 1915, women were given full membership in the American Medical Association, the same year the Medical Women's National Association was formed. The American Medical Women's Association came later.

Now, the AMA has established a new initiative for women physicians and medical students, the AMA Women Physicians Congress. In June 1997, the AMA House of Delegates established the Women Physicians Congress to replace the Advisory Panel on Women Physician Issues. The Congress will be dedicated to increasing the participation of women in organized medicine and providing a forum to effectively address women's health and professional issues and increase representation and advocacy throughout the profession. Membership will be open to all AMA member physicians; non AMA members can join on a trial basis for one year. E-mail will be the primary communication vehicle for the Congress. If interested in joining the Congress, contact:

Phyllis Kopriva, Director
Women and Minority Services
American Medical Association
515 North State Street
Chicago, IL 60610
E-mail:
phyllis_kopriva@ama-assn.org

Nancy Dickey, MD, now the President-elect of the AMA, said, "There are still barriers, but there are very few hurdles that can't be leaped by women who are energetic and dedicated."

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John E. Patchett, JD

EVP Report

Embracing Professionalism

by John E. Patchett, JD, Madison

As I have traveled around Wisconsin this year, I have been struck by a message that I have consistently heard here and in my travels nationally with the AMA and Florida Medical Association. *Bring back the professionalism of medicine.*

When we think about "bringing back" professionalism, it seems important to understand what we want to bring back and how we lost it in the first place. Professionalism, as defined by Random House, centers around a "...professional character, spirit or methods." For me, professional character and spirit conjure up thoughts of ethical, moral physicians putting their patients' needs above all else.

The Public's Perception

Have physicians really lost their professionalism? I don't believe so. Time and again, Gallup polls show that physicians are one of the most trusted professions in America. Most patients are very supportive of "their own doctors," but have concerns about the "rest of them" or "the health system in general."

The public perception of the medical profession as a whole has really only changed recently. As the future of health care has become a national topic debated by government, business and labor, discussions center around costs, quality and the business of health care. Yet, none of these elements evokes the passion of the individual's health care experience -- the birth of a child, a life saved after a heart attack, or a patient and family dealing with the end of life -- the latter which I personally experienced with the recent illness and death of my father. It is these types of events that cause patients to talk about "their" physicians with emotion and passion.

> *The State Medical Society, like the nation, has focused the last few years on the issues that have been at the heart of the national debate: costs, quality and business. We have been very successful at making sure that the physician voice has not been lost in that very public debate.*

The State Medical Society, like the nation, has focused the last few years on the issues that have been at the heart of the national debate: costs, quality and business. We have been very successful at making sure that the physician voice has not been lost in that very public debate. The SMS has been at the forefront of patient quality research with the Medical Outcomes Research Project. In addition, we have been very active in helping physicians with the business issues of their practices from providing contract review services to training for Medicare and Medicaid coding. SMS members need, and we will continue to provide, numerous physician and patient advocacy efforts.

Along with this, though, we need to actively support the professionalism of medicine. At the July, 1997 Board of Directors meeting, a marketing plan for the SMS was reviewed and approved. The central theme of the marketing plan outlines ways in which we can

continue to be a strong advocate and enhance professionalism. During the Board's discussion, Mark K. Belknap, MD, of Ashland, stated, "People perceive that you can't be professional and be an advocate. I don't feel that way." I think he is right. The perception is that there is something wrong with physicians being their own advocate and their patients' advocate, and still remaining true to the profession. The SMS is committed to changing that perception.

SMS Supports Professionalism

As 1997 closes, our membership count will not have expanded above the 1996 count. It is clear that physicians, clinics and teaching institutions are evaluating each organization to which they belong and the value they receive from membership. The SMS is dedicated to providing value to our members. The best way to make sure we are valuable is to ask often and listen carefully to what is said. In the coming months, the professional staff of the SMS will be spending more time on the road at county medical society events, clinic staff meetings, or visiting members' offices. We want to hear from all physicians, members and non-members.

We have begun this effort through a census of the membership that was mailed in July. The response rate was exceptional. The census provides an opportunity to make certain that the SMS can respond to our members and make this organization truly "member driven." Going forward, we will use the census, coupled with focus groups and other research, as a guide for our activities, products and services. We will continue to expand our World Wide Web site, WISMED, including the launch of an exclusive "members only" area in early fall. Expect to see more efforts geared toward staying in touch with members and delivering what you want and need.

The perception is that there is something wrong with physicians being their own advocate and their patients' advocate, and still remaining true to the profession. The SMS is committed to changing that perception.

Professionalism in medicine is alive and well among physicians in Wisconsin. A wonderful recent example was "Doctor Harry Caskey Day," held in Clintonville. Doctor Caskey was a recipient of the SMS Physician Citizen of the Year Award, a special award given annually to physicians who donate their time and talents to their communities. When word got out that Dr. Caskey was to receive the honor in August, the community decided to make SMS President, Dr. Sandra L. Osborn's presentation an event. The Mayor officially declared August 9 as Dr. Harry Caskey Day; Dr. and Mrs. Caskey were the Grand Marshalls of a parade; some of the three thousand people who were brought into the world by Dr. Caskey, an OB/GYN, wore "I'm a Caskey Baby" buttons, and the physician citizen was honored by local and state officials, and even by President Clinton.

There are many more physicians like Dr. Caskey practicing in Wisconsin. I know. I've met them and heard their stories. Their dedication, civic responsibility and high ethical standards are recognized by their patients, colleagues and communities. It is their high level of professionalism that sets them apart. We need to recognize these physicians and make sure that the SMS is known not only for our advocacy efforts, but also for how we, and all of you, enhance the medical profession.

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Meet Your Editorial Board

Thomas Meyer, MD

John Adolphson, MD

Susan Behrens, MD

Joseph Blustein, MD

The *WMJ* Editorial Board is made up of nine physician members who are appointed by the SMS Board of Directors, and functions as an SMS Commission.

The Editorial Board is responsible for the scientific portion of the journal, and receives and reviews approximately 100 manuscripts each year on a wide variety of topics. This time-consuming volunteer position enables the *WMJ* to publish papers of quality and value to our readers. Board members review papers against a checklist of requirements and also make suggestions for ways in which papers may be improved. Our Medical Editor then compiles comments and returns papers to the authors for revisions. The whole process is quite time intensive.

On behalf of *WMJ* readers, I offer many thanks to the Editorial Board members for their dedication and commitment to the quality of the publication.

Judith Burke,
managing editor

(Please see page 69 for Instructions to Authors.)

Thomas Meyer, MD, FRCP
Chair/Medical Editor
Madison

Thomas Meyer, MD, is the Director of Continuing Medical Education at the University of Wisconsin and Emeritus Professor of Pediatrics; he is former Vice-President for Medical Affairs at St. Marys Hospital Center (1986-95). Dr. Meyer obtained his medical degree from Witwatersrand University in South Africa. He has practiced pediatric cardiology in South Africa, Great Britain, Canada, and the United States. Dr. Meyer has been the Chair of the *WMJ* Editorial Board since 1995.

John David Adolphson, MD
Marshfield

John D. Adolphson, MD, a family practitioner with Marshfield Clinic, received his medical degree from the University of Minnesota, and completed an internship and residency at the Hennepin County Medical Center in Minneapolis. Dr. Adolphson is currently Program Co-Director of the Issues in Primary Care Conference at the Marshfield Clinic and served as an Alternate Delegate to the SMS House of Delegates from 1992-1994. Dr. Adolphson is board certified in family practice.

Susan Behrens, MD
Beloit

Susan Behrens, MD, is board certified in general surgery and colon and rectal surgery, practicing at Beloit Clinic and Beloit Memorial Hospital. Dr. Behrens served on the Wisconsin Medical Examining Board for eight years. She was also the first woman to be elected National President of the Federation of State Medical Boards of the United States. Dr. Behrens is a former Chief of Staff at Beloit Memorial Hospital. She received her medical degree from the University of Wisconsin.

Joseph N. Blustein, MD
Madison

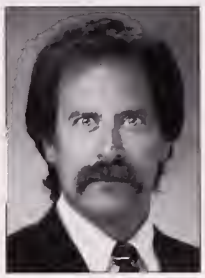
Joseph N. Blustein, MD, an ophthalmologist, is the Medical Director and Associate Clinical Coordinator of MetaStar (formerly WIPRO). He practices at the Madison Community Health Center and the Community Clinic in Madison. Dr. Blustein has been the State Chairman of the Diabetes 2000 Project since

Charles Canver, MD

Kesavan Kutty, MD

Jeffrey Lamont, MD

Charles Schauberger, MD


Benjamin Wedro, MD

1995. He currently serves on the SMS Geriatric Health Commission. Dr. Blustein received his medical degree from the University of Illinois, Chicago.

Charles C. Canver, MD
Madison

Charles C. Canver, MD, is an Associate Professor of Surgery at the University of Wisconsin School of Medicine. He is also Chief of Cardiothoracic Surgery at the William S. Middleton Memorial Hospital and Director of the Heart Transplant Program at the University of Wisconsin Hospital & Clinics. Dr. Canver serves as a guest reviewer for several publications including the *Journal of Thoracic and Cardiovascular Surgery* and the *Annals of Thoracic Surgery*. He received the Physicians Recognition Award from the AMA in 1992.

Kesavan Kutty, MD
Milwaukee

Dr. Kesavan Kutty is board certified in internal medicine and subspecialty pulmonary diseases. He currently serves as Academic Chairman of Medicine and Director of the Transitional Year Residency Program at St. Joseph's Hospital. Dr. Kutty also served as Editor-in-Chief of *Kochar's Concise Textbook of Medicine*, Third edition, Williams and Wilkins Publishing Company (in press). Dr. Kutty is active with several SMS commissions and Medical Society of Milwaukee County Committees.

Jeffrey H. Lamont, MD
Wausau

Jeffrey H. Lamont, MD, is Chair of the Pediatrics Department at Wausau Hospital and serves on the Board of Directors of the Bridge Community Health Clinic. Dr. Lamont is an Assistant Clinical Professor at the University of Wisconsin and President of the Marathon County Medical Society. He received his medical degree from the University of Illinois College of Medicine and served his residency in pediatrics at the Medical College of Virginia.

Charles W. Schauberger, MD
La Crosse

Charles W. Schauberger, MD, is the Chairman of the Department of Obstetrics and Gynecology at the Gunderson Clinic in LaCrosse. He is a member of the Peer Review Council for the State of Wisconsin Patients Compensation Fund. Dr. Schauberger serves as an Assistant Clinical Professor at the University of Iowa, where he received his medical degree and completed his residency.

Benjamin C. Wedro, MD
La Crosse

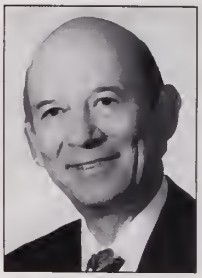
Benjamin C. Wedro, MD, is an emergency medicine physician at Gundersen Lutheran Medical Center in La Crosse. Dr. Wedro is a Medical Consultant for CBS Productions and Medical Correspondent for Voice of America. He is also a Fellow of the American College of Emergency Physicians. Dr. Wedro served the last four years as Chair of the SMS Public Information Commission. He received his medical degree from the University of Alberta in Edmonton.

Who's In The News

William Greaves, MD

Thomas Harper, MD

Grace Heitsch, MD


S.Lawrence Kaner, MD

*Denotes SMS member

Kevin Bluemel, MD,* a primary care physician, joined the medical staff of Mercy Brodhead Medical Center. Doctor Bluemel earned his medical degree from Indiana University, Indianapolis. He recently completed the Mercy Health System Family Practice Residency Program in Janesville, WI.

Donald Burandt, MD,* was honored by the University of Wisconsin Medical School with the Max Fox Preceptor Recognition Award for 20 years of dedication to training medical students. Doctor Burandt is Beloit Clinic's president and on its board of directors, and is a vice president at Beloit Memorial Hospital.

David N. Crouch, MD,* a family practitioner, joined the staff of Medical Associates, Beaver Dam. He earned his medical degree at Loyola University Stritch School of Medicine, and completed his residency at Madigan Army Medical Center, Fort Lewis, WA.

Marshfield Clinic-Lakeland recently honored **Thomas C. Gabert, MD,*** an internal medicine specialist, with the Primary Health Care Educator Award. Doctor Gabert, is a graduate of the University of Wisconsin Medical School, Madison and the Medical College of Wisconsin, Milwaukee. The Primary Health Care Education Award was established to recognize important contributions made by primary health care educators who improve the health of Wisconsin citizens.

William W. Greaves, MD,* associate professor and director of the Master of Public Health degree program at the Medical College of Wisconsin, Milwaukee, is the new President-elect of the American College of Occupational and Environmental Medicine, an international organization of 7,000 occupational medicine physicians. Doctor Greaves earned his medical degree from the University of Illinois School of Medicine, Chicago, and a master of science degree in public health from the University of Utah. He is a diplomate of the American Board of Preventive Medicine.

Thomas Harper, MD,* a family practitioner, joined the Columbia Primary Care Physicians and will practice at the Columbia-Northwest Medical Clinic in Milwaukee. Doctor Harper earned his medical degree from the Medical College of Wisconsin in 1994, and completed his residency in family practice through the Columbia Hospital Family Practice Residency Program in 1997.

The Wisconsin Chapter of the American Academy of Pediatrics honored **Grace Heitsch, MD,*** a pediatrician, as the Wisconsin Chapter 1997 Pediatrician of the Year at its annual meeting. This award is given annually to a pediatrician who has done outstanding work as an advocate for children's health care. Doctor Heitsch earned her medical degree from the University of Minnesota-Duluth Medical School and the University of Minnesota Medical School in 1987. She is a member of the American Academy of Pediatrics, American Public Health Association, and she received the State Medical Society's Physician Citizen of the Year award in 1993.

Christopher Keller, MD

Hamid Khan, MD

Jeffrey Lamont, MD

Keith MacGaffey, MD

After 40 years of service to the Two Rivers community, **S.L. Kaner, MD,*** a family practitioner, retired. Doctor Kaner earned his medical degree from the University of Wisconsin Medical School and completed his internship at St Luke's Hospital, Duluth. He played a key role in the establishment of the Two Rivers Clinic, which is now owned by Aurora Health Care. Doctor Kaner served 20 years as a city health officer, and is a member of the Manitowoc County Medical Society.

Christopher Keller, MD,* joined Doctor Roger Bell in practice at Sheboygan Ear, Nose and Throat. Doctor Keller earned his medical degree from the University of Wisconsin, Madison. He completed his residency training in general surgery at the University of Vermont Medical Center and in otolaryngology at Dartmouth-Hitchcock Medical Center in New Hampshire. Doctor Keller is board certified in otolaryngology.

Hamid Khan, MD,* an orthopedic surgeon, joined the medical staff of Burnett Medical Center. Doctor Khan earned his medical degree from Osmainia University, Hyderabad, India, 1963. He completed his internship at Western Pennsylvania Hospital, Pittsburgh, Pennsylvania, 1965 and his residency in general surgery at St. Margaret's Memorial Hospital, Pittsburgh, PA; a residency in orthopedic surgery at Youngstown Hospital Association, Youngstown, OH, 1968, and an orthopedic surgery residency at University Hospital, Saskatoon, Saskatchewan, Canada, in 1969. Doctor Khan is a board certified orthopedic surgeon. He specializes in the treatment of injuries and diseases of the bone joints, muscles, nerves and ligaments. Doctor Khan is a member of the American Medical Association, St. Croix County Medical Society and the American Academy of Orthopedic Surgeons.

Jeffrey H. Lamont, MD,* was re-elected to the National Faculty of the Pediatric Advancement of Life Support Program of the American Heart Association. The P.A.L.S. Program is dedicated to research and education regarding acute care of critically ill children. Doctor Lamont chairs the Committee on School Health for the Wisconsin chapter of the American Association of Pediatrics.

Keith MacGaffey, MD,* an internist, joined the medical staff at Medical Associates Health Center, Menomonee Falls. He earned his medical degree from the University of Rochester in 1959, and completed his internship and residency at Highland Hospital, NY, 1962. He is a fellow of the American College of Physicians and served on the Governor's Council of the San Diego Chapter for many years. During the last three years, he was a surveyor for the California Medical Association.

Joining the medical staff at OB-GYN Affiliates, SC, **Steven McCann, MD,*** an obstetrician and gynecologist, earned his medical degree from State University New York, Health Science Center at Brooklyn, graduating *Summa Cum Laude.* He completed his residency at Columbia University, and is a member of the American College of

Who's In The News

Steven McCann, MD

Roxann Rokey, MD

Len Scarpinato, DO

Obstetricians and Gynecologists, American Medical Association and the Milwaukee Gynecological Society.

Kim Peterson, MD, has been named president-elect of the Wisconsin Association of Medical Directors.

Recently elected to the American Heart Association executive board, was **Peter S. Rahko, MD,*** cardiologist. Doctor Rahko is an associate professor of medicine at the University of Wisconsin, Madison. He earned his medical degree from the University of Minnesota, Minneapolis, 1979, and completed his internship and residency at Indiana University Medical Center, Indianapolis. He is a member of the American Heart Association, American College of Physicians, American Society of Echocardiography, and the Dane County Medical Society.

At its annual meeting in Madison, the American Heart Association of Wisconsin elected **Roxann Rokey, MD,*** an internal medicine physician from Marshfield, to the board of governors. Doctor Rokey earned her medical degree from the University of Arizona College of Medicine, Tucson, AZ, and completed her internship, residency and a fellowship in cardiology and internal medicine at Baylor College of Medicine Affiliated Hospitals, Houston, TX. She is currently a director of the Adult Congenital Heart Disease Clinic at Marshfield Heart Care and clinical associate of medicine at the University of Wisconsin, Madison. Doctor Rokey is a member of the American Medical Association, American College of Cardiology, American College of Chest Physicians, Society of Magnetic Resonance in Medicine and Society for Cardiovascular Magnetic Resonance Imaging.

Len Scarpinato, DO, formerly assistant director of the St. Mary's Hospital Family Practice Center in Milwaukee, has been named residency program director for the Racine-Kenosha Family Practice Residency Program.

During the Medical Alumni Association Awards Banquet in Madison, **Lee L. Schloesser, MD,*** a hematologist and director at the University of Wisconsin Medical School, received a Distinguished Teacher Award. He was recognized for his dedicated commitment to teaching and excellence. Doctor Schloesser earned his medical degree from the University of Kansas Medical School, and completed a residency in internal medicine at the University of Wisconsin Hospitals, Madison, 1955, and a fellowship in hematology in 1956. He was the first board-certified hematologist at Marshfield Clinic in 1957. Doctor Schloesser began working more closely with medical students over 20 years ago, which he continues today. He retired from his practice in January.

Michael J. Schmalz, MD,* a gastroenterologist was appointed chief of gastroenterology at St. Luke's Medical Center in Milwaukee. He earned his medical degree at the Medical College of Wisconsin, Milwaukee, and completed his residency and a fellowship at the Medical College of Wisconsin Affiliated Hospitals, Milwaukee. He is a member of the American Medical Association, American Gastroenterological Association, American Society for Gastrointestinal Endoscopy,

Lee Schloesser, MD

Michael J. Schmalz, MD

Danny Sessler, MD

for Gastrointestinal Endoscopy, American College of Gastroenterology, and Racine County Medical Society.

Bart Schmidt, MD, a radiologist, joined the medical staff of Mercy Hospital. Doctor Schmidt earned his medical degree at the Medical College of Wisconsin, Milwaukee. He completed his internship at St Joseph's Hospital in Milwaukee and completed his residency in diagnostic radiology at the Medical College, where he also continued his education with a fellowship in body imaging.

Andrew J. Schroettner, MD,*a psychiatrist joined the medical staff of Family Resources Associates in Watertown and Lake Mills. Doctor Schroettner earned his medical degree from the Medical College of Wisconsin, Milwaukee, and completed his residency at the Medical College of Wisconsin Affiliated Hospitals. He served as chief resident at the Columbia Psychotherapy Center and as a consultant for Cudahy Public Schools. Doctor Schroettner recently began overseeing the outpatient Obsessive-Compulsive disorder program at Rogers Memorial Hospital. He is a member of the American Medical Association, the American Psychiatric Association, and the Wisconsin Psychiatric Association.

Recently inducted as a Fellow of the American College of Physicians was **Danny R. Sessler, MD,*** an internal medicine specialist practicing with Baraboo Internal Medical since 1984. Doctor Sessler earned his medical degree at the Medical College of Wisconsin, Milwaukee, 1979, and completed his residency at the University of Michigan Medical Center, Ann Arbor. He is a diplomate of the American Board of Internal Medicine, and a member of the American College of Physicians, and the medical staff of St Clare Hospital & Health Services.

Arthur M. Sonneland, MD,* an urologist and a partner at Urological Surgeons, has been elected as president of the Wisconsin Urological Society. He is certified by the American Board of Urology and is a Fellow of the American College of Surgeons.

Jeanine Marie Swenson, MD, a pediatric cardiologist joined the medical staff of Mercy Health System and the Mercy Regional Heart Center. Doctor Swenson earned her medical degree from the University of Wisconsin School of Medicine in Madison. She completed a residency and fellowship in the Division of Cardiology at Children's Hospital of Pittsburgh, Pennsylvania.

Michael Tieman, MD,* a surgeon, was appointed to serve on the Memorial Community Hospital Board of Trustees. Doctor Tieman earned his medical degree at Case Western Reserve University School of Medicine, and completed his residency at Emory University Affiliated Hospitals. He is a board-certified general surgeon, practicing at the Edgerton Clinic and is chief of surgery at Memorial Community Hospital.

Rosanna Ranieri, MD

Profile of a Physician Citizen of the Year Award Winner*

The Physician Citizen of the Year award honors recipients for the uncompensated civic, cultural, economic, charitable, and health care services they have provided to their local or state communities, recognizing those who have given their time and talents to improve conditions in our state.

Implemented in 1982 as a colleague-nominated award, the Physician Citizen of the Year award's annual nomination process was opened to the public in 1991. The result was an overwhelming outpouring of admiration and affection for Wisconsin's physicians. Each year since then, based on these nominations, the State Medical Society's Commission on Public Information selects up to eight award recipients from various SMS districts in the state.

**The 1997 SMS Physician Citizen of the Year Award was awarded to eight individuals around the state. The WMJ will profile each of these award recipients in upcoming issues.*

Rosanna Ranieri, MD, of Kenosha, is one of the eight 1997 SMS Physician Citizen of the Year Award recipients.

Dr. Ranieri was nominated by James Schoening, MD, of the Kenosha County Medical Society for her charitable work with developmentally disabled persons, dialysis patients and the less privileged in Kenosha. Dr. Ranieri is responsible for organizing two charity events, which raised $40,000 for the Kenosha Achievement Center; she participated in countless auctions of her special home cooking, the proceeds of which were donated to the community; and she designed and implemented a bed and breakfast service for renal patients.

In addition to her philanthropic activities, Dr. Ranieri remains active in the political arena, having hosted successful fund raisers and assisted with several campaigns. As Doctor Schoening states, "It is evident that Dr. Ranieri is an exceptional humanitarian who deserves our recognition."

During her acceptance speech, Dr. Ranieri touched upon the importance of being active. "We are all lured into an endless chase of form over substance. And, when you really think about it, we all want and need the same thing: the best life has to give us. Think about that. Who does the giving of that? We can only find that "Who" in the mirror. . .when you honor me, you are honoring yourselves, that which we all own -- the precious opportunity to contribute to the village of our lives and the lives yet to come."

SMS President, Sandra L. Osborn, MD, noted that "Dr. Ranieri has demonstrated beyond a doubt that she is worthy of the title *physician citizen of the year.*

"Today the physicians of the State Medical Society add our thanks, along with those whose lives have been made better by her efforts."

Congratulations, once again, to Rosanna Ranieri, MD, 1997 recipient of the Physician Citizen of the Year Award.

In Remembrance

James A. Heck, MD, 61, a family practitioner from Kenosha, died June 14, 1997. Doctor Heck earned his medical degree from the University of Illinois Medical School in Chicago. He interned at Illinois Central Hospital. Doctor Heck served as a captain in the US Air Force from 1962-1964. He began his practice in 1965 with Family Practice Associates of Kenosha.

Doctor Heck served as a past chief of staff of St. Catherine's Hospital (now Siena Hospital-North); he also served on the staff of both St. Catherine's, and Kenosha Hospital and Medical Center (now Siena Hospital-South).

He was a member of the American Medical Association, the American Association of Family Physicians, Kenosha County Medical Society, and the State Medical Society. Doctor Heck is survived by his wife Linda; four children: Jennifer K Heck of Marinette; Amy Heck Bourne, MD, of Madison; John L Heck of Carol Stream, Ill; Andrew D Heck of Westchester, Illl; one grandson; and a sister, Joan Demong of Freeport, IL.

Frederick B. Klaas, MD, 81, a family practitioner from Ellsworth, died July 6, 1997. Doctor Klaas earned his medical degree from Marquette University Medical School in 1943. He completed his internship at St Ann's Hospital in Chicago and received his fellowship in family practice in 1974.

He entered the military service, serving as a Captain in the United States Army. He established a hospital while in Korea. Doctor Klaas was honorably discharged from the military.

He was the first doctor with a specialty of Family Practice to practice medicine in Ellsworth in 1947. He was in solo practice in Ellsworth for 38 years. In 1985, he merged with Eugene R. Jonas, MD, to form the Jonas-Klaas Medical Clinic. He later joined the River Falls Medical Clinic which is still operating in Ellsworth.

Doctor Klaas served as President of the Pierce County Mental Health Council in 1949, he was an active member of the Pierce-St. Croix County Medical Society, serving as President in 1954 and 1964. He served on the Medical Societies Nurses Scholarship committee and numerous health committees in the society.

Doctor Klaas was the chairman of the first Bi-County Polio Immunization Program, and before the Salk vaccine was available, he was instrumental in constructing rooms for polio patients so they would not have to remain at the Sister Kenny Institute.

Doctor Klaas served as chairman of the Pierce County Chapter of the Wisconsin Heart Association for many years, beginning in 1951, and was an active member of the American Cancer Society and other health organizations in Wisconsin; he received recognition for his work from the Governor and several U.S. presidents. He was elected Pierce County Coroner and held that position until 1983. Doctor Klaas is survived by his wife, JuDea; five children: David Klaas of Spooner; James Klaas of Ellsworth; Nancy K. Klaas of Hudson; Suzanne Duthler, of Cedar Rapids, Iowa; and Martha Baker of Eden Prairie, Minnesota; and 13 grandchildren.

Harold H. Oberfeld, MD, 91, an allergist/dermatologist from Illinois, formerly from Milwaukee, died February 15, 1997. Doctor Oberfeld earned his medical degree from McGill University, Montreal, Canada in 1928. He completed his internship at Mt. Sinai hospital in Milwaukee in 1929. He was a member of the Medical Society of Milwaukee County and the State Medical Society of Wisconsin. He is survived by his wife, Dorothy.

Frank J. Pulito, MD, 76, a family practitioner from Milwaukee, died June 12, 1997. Doctor Pulito earned his medical degree from Marquette University in 1944. He completed his internship at Milwaukee Hospital, Milwaukee in 1945. Doctor Pulito served as a U.S. Navy physician in both World War II and the Korean War.

Doctor Pulito was a member of the Medical

Society of Milwaukee County, and State Medical Society of Wisconsin; he was inducted in the SMS's Fifty Year Club. He is survived by his wife, Rosemary; three children: Ann Pulito; Domenic Pulito; and Jean Pulito; and three grandchildren.

Philip, M. Wilkinson, MD, 84, an ophthalmologist and ear, nose and throat specialist from Oconomowoc died May 18, 1997.

Doctor Wilkinson earned his medical degree from Marquette University Medical School in 1939, and completed his internship at Milwaukee County General Hospital in 1939, and his residency in 1946. Doctor Wilkinson served in World War II, and then joined his father's clinic where he remained until retirement in 1984.

He was a member of the Waukesha County Medical Society and the State Medical Society of Wisconsin. He is survived by his wife, Mary Elizabeth; three children: Eileen Daly of Oconomowoc; Neal Wilkinson S.J. of Milwaukee; and Mark Wilkinson of Oconomowoc; and two grandchildren.

AMA Awards

The Wisconsin Physicians listed below recently earned AMA Physician's Recognition Awards. They have distinguished themselves and their profession by their commitment to continuing education, and the SMS offers them its congratulations. The * indicates members of the SMS.

Beachley, Brenda R.
* Bernacki, Michael H.
Chia, James Kuao-Young
* Colan, Richard V.
* Haesemeyer, Allan J.
* Idarraga, Samuel
* Johnson, Steven J.
* Pawlak, James R.
* Seifert, Keith G.
* Song, Hwe-Jae
* Stewart, William A.
* Stokes, Annette S.
* Wagner, Marvin

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Welcome New Members

The individuals listed below were recently elected to SMS membership by their county medical societies. We are pleased to welcome them to the SMS.

Chippewa
John J. Jacks, MD
Mahmoud S. Taman, MD

Crawford
Christopher R. Burrows, MD
R. Timothy Fitzner, MD
Michael M. Kaplan, MD

Dane
Jacquelyn K. Aschenbrenner
Gregg A. Bogost, MD
Amy M. Card, MD
Eugene Shedden Farley, Jr.
Linda Fabry Farley, MD
Mohammed Ghouse, MD
Gerard N. Kiernan, MD
Patrick M. Lyons, MD
Timothy J. O'Neil, MD
Paul A. Staskowski, MD
Steve T. Weiland, MD

Door-Kewaunee
Kurt G. Harris, MD
Sidney Schulman, MD

Douglas.
Sarah K. McDonald, MD

Grant
David M. Huante, MD

Jefferson
Jonathon G. McLaughlin, MD

LaCrosse
Patrick D. Conway, MD
Linda C. Groon, MD
Daniel G. Dawson, MD
Sylvia A. Firary, MD
Michael S. Meyers, MD
David A. Newcomer, MD
Jason D. Walsh, MD

Manitowoc
Brian P. White, MD
Charles A. Cahill, III, MD
Pradeep Giriyappa, MD
Stephen G. Hyde, MD
Paul J. Ruh, MD

Marathon
S. Mohsen Sharifi Takieh, MD
Allen Wolf, MD
Paul A. Luetmer, MD
Timothy M. Seidelmann, MD
Brian B. Skaletski, MD
Larry C. Studt, MD

Marinette-Florence
Anthony C. Vacca, DO

Monroe
Aaron Hanesworth, MD
Gary Peitzmeier, MD

Oneida-Vilas
James C. Agre, MD
Mark Banas, DO
James V. Grebner, MD

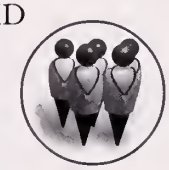
Polk
Keith Edward Hartman, MD

Portage
Christopher S. Nielsen, MD
Carol D. Rave, MD

Racine
John M. Oscherwitz, MD

Sauk
Eva C. Larocque, MD
Shawn J. Foley, MD
Steven W. Kincaid, MD

Vernon
Jeffrey M. Lawrence, MD



Waupaca
Richard P. Boyer, MD
Paul D. Erickson, MD
Donald M. Piniach, MD

Wood
Qiang Cai, MD
Eric Locher, MD
Jeffrey Quitman, MD
Harjot Sidhu, MD

Russell G. Robertson, MD

Guest Editorial

What's in a Name?

Russell G. Robertson, MD, Milwaukee

Recently, I found myself spending the better part of one day successfully convincing myself that my life was unfairly difficult and overwhelming. Patient-related problems, administrative hassles and a stressful meeting with my residents made the allure of a restful evening appealing. That visage was shattered by the word "CALL" as I rechecked my pocket calendar. Maybe it would be a quiet night.

I arrived in the birthing center at about 9:30 p.m. A woman unknown to us but assigned to our clinic who had been seen in the emergency room two nights earlier waited. At the time, she thought herself about 12-weeks pregnant and was discharged from the emergency room after presumptive treatment for a gonococcal infection with instructions to follow up in our office the next day. Prior to that afternoon's visit, her membranes ruptured and a more thorough history revealed that she was 19-weeks pregnant. A pelvic exam disclosed the infant's head beginning to protrude through the cervix.

Cachectic (she said she never weighed very much) and solemn, she awaited the inevitable. Alone by choice, she told us some of her story. The mother of three teenagers, her last pregnancy resulted in a third trimester fetal demise. She had just returned from staying with relatives in Atlanta, a respite intended to ease some of the pain after her husband and the father of her children had been murdered, stabbed 28 times by a childhood friend invited to stay in their home. What an inauspicious homecoming.

Yet the night seemed designed to meet her needs. Two L&D nurses had made it clear that they were prepared to address far more than her physical comfort. The resident on that night had suffered through an all too similar experience just months earlier and elected to stay involved despite being offered the chance to decline participation. Quite literally she was being spun a cocoon of affection and support.

Time passed with little progress. Pitocin was started and at 10:04 p.m. her daughter was born. Digits and eyes fused, her mouth plaintively open, her arms and legs moved marionette-like. So small and delicate was she. Her heart rhythmically throbbed visibly beneath the cellophane skin of her semi-transparent chest wall. We quickly divided the pencil thin umbilical cord and presented her to her mother, her face a combination of torment and surprise. Tear-filled glances were exchanged with few words spoken.

Distracted by a recalcitrant placenta, she asked not to hold her daughter for awhile. Swaddled in a blanket, the next three hours found this little one caressed by at least three other nurses and two more of my residents before, like a firefly, her brief life was over and she was returned to her mother for one last goodbye.

The events of the evening concluded, I returned home. The next day I learned the magnitude of the gifts of love exchanged that night. Before her mother's last embrace, she gave this child a name: the first name from the nurse and the middle name from the resident. What a stirring reminder of the privilege we enjoy entering so deeply into the pain and suffering of others and so welcome is the rebuke dislodging us from our own trivial self-pity. I now know more profoundly all that can be in a name.

Dr Robertson is an assistant professor and program director at Columbia Family Practice Residency Program in Milwaukee.

Guest Editorial

Patricia Barwig, MD

The Winds of Change in Medicine

by Patricia A. Barwig, MD, Brookfield

"A woman can do anything she wants,
she just can't do everything she wants."

Virginia Apgar's cogent observation rings as true today as ever it did, and applies particularly aptly to women in medicine. The practice of medicine today is more than a full-time job. Combining a traditional medical practice with the traditional woman's role of relationship building, child-bearing, child-rearing, and housekeeping is a foolproof recipe for overwhelming feelings of guilt and inadequacy on all fronts.

The accommodations women in medicine make to try to "have it all" include part-time practice, variously known as the Mommy track or a waste of a good medical education. Equally scorned are the house husband (Mr. Mom) and day care (check Dr. Laura for a few choice epithets). Despite the Herculean efforts these accommodations require, none of them truly addresses the problem.

The problem lies neither in medicine, nor in the essential nature of women. It is considerably more complex and resistant to solution, because it is cultural. The fruits of the industrial age have made life tasks easier to perform, but the work has expanded to provide higher levels of sanitation and education and greater numbers of material possessions.

This societal problem can be seen in medicine as well. The oldest generation of physicians can remember as interns doing a good history and physical exam, running their own urinalyses and blood counts, prescribing a few thousand units of penicillin if appropriate and then tucking the patient in until morning. Now, databases and Coulter counters make quick work of the basics and the resident must remember to order multiple scans and ever-more exotic diagnostic tests and to utilize treatments with very short windows of efficacy, leaving even less time to spend with the patient. Medicine leads us down a path that Indiana Jones would find treacherous (envision the snake pit as malpractice court), and leaves us with even less time for ourselves. In the meantime, by raising our patients' expectations of glowing health and solicitous care, we have set ourselves up for feelings of guilt and inadequacy.

Women have made advances in medicine on many fronts. Medical school enrollment of women has increased to roughly 50%, and specialties once closed to women have admitted a few. Still, some residencies are quite difficult for women to match in, and individual professors and staff members occasionally long for the good old days when sexual innuendo was the tried and true method of bonding with the doctors of tomorrow.

Nonetheless, there is change in medicine, partly due to female physicians and largely due to female patients. Women are acknowledged to be the major consumers of health care. More and more, they are seeking physicians who are empathetic as well as

Patricia A. Barwig, MD is a board certified OB/GYN who has practiced for more than 12 years. A graduate of Marquette University and the Medical College of Wisconsin, she completed her residency at Milwaukee County Medical Complex.

competent. The common preconception is that this describes all female physicians. While this prejudice has no more basis in fact than the Archie Bunker-esque presumption that all Jewish lawyers are first-rate, it does give practicing women physicians a heretofore unheard-of advantage. This is not generally the case in other professions, nor is it true for medical researchers, where the consumers are not women, but corporations and government bodies.

Is this leading to what a male family practitioner recently characterized as the "feminization of medicine?" Some male physicians are perceiving that their time-honored hegemony is being eroded, threatening their ability to provide for themselves and their families. Changes have occurred in the last 20 years with unnerving rapidity and to some seem to constitute an invasion; an invasion by the wives and daughters of the defenders.

These wives and daughters and nieces and cousins are clamoring for a more sympathetic ear. They want women-focused care, and are demanding research into "women's diseases." While in the past, male research subjects were the rule, and results were presumed to include women, now gender-specific research is ongoing. Consumer pressure has had a salutary effect on research into heart disease in women (Women's Health Initiative), breast cancer (discovery of BrCal and BrCa2 genes), Pap smears (Papnet, thin preps), and obesity (Redux, Phen-Fen -- okay, so nothing's perfect).

Societal ills are at the root of many medical problems, and women have their share of them, including domestic violence and poor access to health care because of inadequate (or absent) health insurance. Home health care and long-term health care also emerge as women's issues because of female longevity and its frequent companion, chronic illness. Attention to conditions particular to female patients, as well as honest attempts to deal with more global issues, will improve the health of humanity as a whole.

In the end, the physician should choose this profession for just this reason, to help and heal patients. Those who become physicians to achieve prestige, power, acceptance, or wealth are inevitably going to be disappointed. The care of patients should consume the workday.

The interpretation of the changes in medicine is of course subject to the situation of the observer. Women in medicine are improving their position, and the care of women is being given a more scientific basis. Whether the changes constitute an alarming excess or a pathetic sop depends on one's viewpoint. I suspect that despite our best efforts, the future will probably bear out the truth of Paul Simon's observation "The nearer your destination, the more you're slip-sliding away." I'd love to be proven wrong.

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A Woman's Place in Medical History

by Jeremy Pittenger, contributing editor

"I wanted to be a dog doctor." Those are the words of the first woman to receive tenure with the University of Wisconsin Medical School, Department of Anesthesiology. It wasn't until Betty Bamforth, MD, was told by her father that dog doctors take care of more than just dogs, that Doctor Bamforth

quickly changed her mind. Years later, she would meet a woman physician while boating in upstate New York. During that trip, the thought of becoming a physician finally entered her mind.

A True Wisconsin Pioneer

"I didn't even know a woman could be a doctor until I met her," says Bamforth. Then in 1944, Betty Bamforth enrolled in the medical school at Boston University.

Bamforth considers herself quite lucky to have attended Boston University. "Boston University was very liberal in allowing women to study medicine," says Bamforth. This was probably due in part to the fact that the New England Female College was eventually taken over by the University.

"Many schools had to meet certain quotas as far as who studied there. For example, one-third of the students were Jewish; one-third from out-of-state; and one-third male. I think Yale University had a 5% women quota. Harvard, I believe, had no obligation to enroll women."

So begins the career of a woman physician. Indeed, there were obstacles and challenges presented to her, but Betty Bamforth, MD, met each one and persevered. Bamforth credits the women she followed with paving the way.

"A woman a year ahead of me in residency always tried to do more than what was expected. Many of us followed in her footsteps, knowing we had to prove ourselves. However, to my recollection, I can't remember anyone ever saying, 'No way, women can't be doctors.' If anything, I would hear references to our young ages, but not about our gender."

However, Bamforth admits women in her class were the subject of good-natured teasing by male students. Although no one ever treated them with disrespect. "Actually, during our residency a group of women, including myself, lived behind the student infirmary; whereas the men were back with their families. We quickly gained respect and experience just by being available during emergencies. That was also during the polio outbreak. We spent many an hour at Children's Hospital treating patients."

> *"A woman a year ahead of me in residency always tried to do more than what was expected. Many of us followed in her footsteps, knowing we had to prove ourselves."*
>
> *Betty Bamforth, MD*

Despite what Bamforth sees as a general acceptance to allow women to study medicine, there were regular hardships for women to bear. "Of course, finances presented a problem as much for the women, if not more, than for the men. During the Depression, if a family was strapped for money, the man would be sent to school over a woman.

Also, after the War, women were told to stop working in the factories in order to make room for the returning men. They were told to go back home and take care of the family; no one ever stressed the value of going back to a profession."

Education not the Only Challenge

When Dorothy Betlach, MD, was a pre-med student at the University of Wisconsin she contracted rheumatic fever and had to forestall her grade-school dream of becoming a physician. Opting to enter a four-year medical technician program, she now considers her illness a "Godsend." After the four-year program Betlach worked for about a year in the west coast during World War II. She came back to the University of Wisconsin, entered medical school and in 1946, graduated with a medical degree in anesthesiology.

So, how could someone consider rheumatic fever a "Godsend?" For starters, Betlach met her husband, Eugene Betlach, MD, a now-retired Janesville radiologist, in her class and they married a few days after completing graduate school.

"Medical school was demanding," says Betlach. "We finished a four-year program in 34 months. We didn't have vacations -- we had an occasional long weekend, maybe a week off here or there. In my class, we had 16

Profile of a Wisconsin Pioneer: Amy Louise Hunter-Wilson, MD

In 1992, the State Medical Society of Wisconsin Foundation (then known as the Charitable, Educational, and Scientific Foundation) first awarded the Amy Louise Hunter-Wilson, MD, Scholarship. The purpose of the fund is to assist Native Americans who pursue training or advanced education as physicians, nurses, technicians, or in a related health field. Doctor Hunter-Wilson felt a deep commitment to educate people of all socio-economic backgrounds on proper health and preventative care.

Having served as the Director of Maternal and Child Health for the state of Wisconsin from 1935 to 1961, Dr. Hunter-Wilson had a tremendous impact on the advancement of the health and lives of mothers and children all over the state and nation. Many of her accomplishments were the result of making sure people in rural and lower income areas had the same opportunities as those in upscale communities.

Born in New York City in 1898, this young girl of Quaker heritage became an impressive medical scholar. She attended Vassar College for Women where she earned a degree in natural sciences, and then continued her education at Cornell University where she received a Master of Science degree in nutrition. In 1930, she was among four women who graduated from Yale Medical School. Four years later, despite heavy faculty opposition, she earned her doctorate from the Yale Medical School of Public Health. At that time, public health was not considered a favorable field for women.

It was Dr. Hunter-Wilson's early interest with premature births that helped begin a career of preventative medicine. She conducted early research which indicated that pregnant women who smoked were more likely to deliver premature babies. Unfortunately, her research was not immediately accepted. Forty years later, such research proved true. She went on to study the effect diets have on the physical flaws of children, working as a collaborating pediatrician at the University of Maine, and shortly thereafter, accepted a directorship in Wisconsin under the guidance of State Health Officer C.A. Harper.

During her tenure, Amy Hunter-Wilson, MD, was active in an SMS committee that focused on maternal death prevention and spearheaded SMS activities dealing with premature and neonatal deaths. Her efforts were based on her visits to Native American reservations and areas of rural Wisconsin. Doctor Hunter-Wilson is credited with the provision of wooden incubators for use with premature infants in home deliveries and smaller hospitals before modern incubators were developed. She helped to formulate hospital team training for premature infants; developed a nutrition program for the State Board of Health; and was very active in several organized medicine specialties.

For more information on the Amy Louise Hunter-Wilson, MD, Scholarship, please contact Jane Anderson, SMS Foundation Student Loan and Scholarship Coordinator at (800) 362-9080 or via e-mail at: JANEA@smswi.org.

women who started and eight who graduated in 1946. Out of the other eight who dropped out, most eventually graduated; one even went on to teach anatomy."

Betlach remembers well the time she spent studying medicine. "During the war, the medical schools were eager to educate young people. There was a definite need for

students, so I never felt any resilience to being accepted as a woman medical student. Anyway, I think since at least 1927 there has always been one or two female medical students at the University of Wisconsin; a school I think that has been quite receptive to educating women.

"Of course, there was some opposition to women practicing medicine. Although I believe the University was a forerunner in allowing women to study medicine, there were instances of gender bias. For example, my obstetrician never received a professorship; something she was well-deserved to be given."

The problems Betlach experienced as a female medical student had more to do with being a student, rather than with her gender. "I remember one time dealing with the state of Wisconsin, my father's employer. I applied for a loan through the State, as they would pay for my books. My anatomy book was $12 and the state refused to believe that a book could cost that much. It was little things that I found myself fighting."

But there were more challenges to face beyond medical school. After their internships and residencies, the Betlachs started a family and made their home in Janesville, WI. Having completed her last year of residency in Janesville, Betlach found that meeting the demands of motherhood and her profession were becoming extremely difficult. Unable to find adequate child care for her two children, Betlach became a full-time mom. She stayed active in her profession through such work with the Wisconsin Society of Anesthesiologists, of which she served a term as president.

Betlach never went back to practice medicine full-time. "I knew there would be so much more to know. I would have to return to school and catch-up on a significant amount of studies. In addition, medical malpractice was just coming about, and I really didn't desire the extra stress. So, I stayed active indirectly. I really wouldn't change a thing either."

> *"In my class, we had 16 women who started and eight who graduated in 1946. Out of the other eight who dropped out, most eventually graduated; one even went on to teach anatomy."*
>
> *Dorothy Betlach, MD*

All in the Family

Her great grandmother was a physician who graduated from the Medical College of Philadelphia. Her father was a physician and her two brothers followed in his footsteps. It only seemed natural that Virginia Garne Wintersteen, MD, would continue the family tradition. However, as a physical education major, Wintersteen always thought she would be a physical education teacher, coach and trainer. It wasn't until she observed a team physician at the University of Wisconsin during the second semester of her junior year that she started considering becoming a sports medicine physician. Today, Wintersteen, a physician with the La Crosse Gunderson Clinic, is one of the 2%-3% of women orthopedic surgeons.

Practicing for the past ten years, Wintersteen is the mother of six and wife of a small business owner. She specializes in pediatric orthopedics and adult trauma. "The women my father went to school with -- those were my early supporters," says Wintersteen. "I also had a great mentor and advocate, Dr. Clancy. Ironically, I think if anyone seemed unsure of my future it may have been my mother. I remember her asking, 'How are you going to be able to balance being a doctor and raising a family?' My answer? 'Well, Dad is a doctor and Dad has a family."

However easy it may have sounded to balance a family with a career in medicine, Dr. Wintersteen believes it would have been impossible to do both during medical school and her residency. "I just can't imagine trying to have a family during my residency," says Wintersteen. She eventually married during her fellowship.

Aside from such concerns, Wintersteen never felt she was treated unjustly as a woman. "I think the women before me

helped pave the road," says Wintersteen. "I don't feel discrimination today. Even in my early days of practice, when cases were taken away from me, I truly feel they were taken away because I wasn't ready for them. Of course, this depends on whom you ask. I do remember a woman peer who felt gender was the basis for such decisions. I can honestly say the Chief treated everyone with the same amount of disrespect."

It has been said that orthopedic surgery is more difficult for women. There is concern about time pressures and physical demands. "Yes, orthopedic surgery is a tough field for women to enter, but I think it's getting better," says Wintersteen. "The physical demands and time restraints are big challenges, however, we have more technology now that can assist us with bone placement, etc. It's true that life can be difficult when you are responsible for your family and you are up all night dealing with trauma patients. You really need patience -- you really need to love what you do; that is, helping patients."

Although Wintersteen never felt she was treated unjustly, she does find that the older generation views her differently.

"I remember one time in particular. I had overseen this older patient's case for about five days. A male physician assistant stopped by the patient's bed, and the patient assumed he was the doctor -- even though I had done all the previous work up to that point. There were many times that I was not identified as being the surgeon. I had cases where a patient would wake up after surgery and exclaim, '*You* did the surgery?'"

> *"It's true that life can be difficult when you are responsible for your family and you are up all night dealing with trauma patients. You really need patience -- you really need to love what you do; that is, helping patients."*
>
> *Virginia Garne Wintersteen, MD*

Occasionally, Wintersteen also sees working with her older male peers as a challenge. "I'm not sure women orthopedic physicians are respected as much as our male counterparts. There's definitely an established network within specialties. You almost feel like you are on the outside. I can't say it's solely because of gender, however. Being in private practice and not being associated with an educational institution, it's just harder to establish yourself in orthopedics."

Next Step: Leadership

Although women physicians remain a minority, they are represented at all levels of professionalism and organized medicine. Just this past June, Nancy W. Dickey, MD, was elected President-Elect of the AMA. In addition, the SMS's current president is Sandra L. Osborn, MD, the third woman elected to this prestigious position. Clearly, pioneers like Betty Bamforth, MD, and Dorothy Betlach, MD, and practicing physicians like Virginia Wintersteen, MD, have played an instrumental role in changing the way women are perceived in medicine.

Profiles of Wisconsin Women in Medicine

by Marc Kennedy, special to WMJ

Forty years ago, fewer than one in ten medical students in the U.S. was female. Today, nearly half of the medical students and 21% of practicing physicians are women. The American Medical Association (AMA) estimates that by 2010 women will comprise one-third of all practicing physicians in the nation.

Helping pave the way for women in medicine today were those who bucked the trend in a male-dominated field in the 1950s and 1960s. The sacrifices and determination by these women, behind the backdrop of a societal raising of consciousness in the 1960s and 1970s have open doors for today's female medical students. Increasing numbers of qualified female applicants and increased awareness of debilitating effects of gender bias in the workplace — as well as the countervailing threat of sanctions against transgressors — has helped remove more barriers, making medicine more accessible and attractive to women.

Even as the medical profession becomes more gender egalitarian, there remain vestiges of the 'Old Boys Club' of the past, ranging from the subtle and innocuous to outright sexual harassment. And, as the proportion of female physicians increases, so to is the emphasis on researching and treating issues that predominantly concern women — breast cancer and ovarian cancer, heart disease, access to prenatal and elder care, and the imperative to balance parenthood and professional responsibilities. In turn, there is and will continue to be the need for more women in medicine to assume leadership roles at the community, state and national levels.

> *"I was so mad because male students would not have been asked to leave the room if a pelvic exam was being performed, but, I left, mainly not to make a fuss in front of the patient. Later, I wished I had done something."*
>
> *Kathy Bemmann, MD*

Several Wisconsin women physicians offer personal perspectives on their struggles and triumphs, large and small, and on the prospects and challenges for the future.

You've Come a Long Way...Dr. Baby

Thirty years ago when psychiatrist Kathy Bemmann started medical school, she was on her own despite the presence of two other women in a class of 100.

"It was pretty lonely," she says, "one of the women became involved with a male med student almost right away, and the other was a nun. That left me basically on my own."

The Manitowoc physician recalls that she "tolerated a great deal of isolation" and that being somewhat of an anomaly, "women had to work harder than the male students."

Bemmann added that "there was a blessed ignorance then" concerning gender bias, though a few incidents did anger her. In one instance during her junior year, an internal medicine instructor at a Veterans Administration hospital asked her to leave the

room when examining a patient's scrotum.

"I was so mad because male students would not have been asked to leave the room if a pelvic exam was being performed," Bemmann said. "But, I left, mainly not to make a fuss in front of the patient. Later, I wished I had done something. I was there to learn, and that behavior was a violation of my student rights. I remember going to the lunch room, just sitting there; I was just stewed over the whole thing."

Adding that she felt she should have registered a protest, but that sort of thing just wasn't done then. Later, when she discovered one form of institutional discrimination, her insurer was offering different rates for male and female physicians, Bemmann had had enough.

"That got to me," said Dr. Bemmann. "I guess that was the beginning of my own consciousness raising, in the early '60s, along with many other women. It shows what group dynamics can do. Before that, it was done one woman at a time.

"A lot of it had to do with power. I was young, alone, inexperienced; afraid to challenge the status quo. But today, women are more likely to rock the boat."

Radiation oncologist Judith Stitt, MD, of Madison concurs. For her, the art of getting by in the early to mid '70s in medical school was "to be one of the guys. Keep a low profile; don't be different. I always had the feeling that it was not acceptable to be anything other than what men expected."

After reading *A New Prescription for Women's Health* by Bernadine Healy, MD, Stitt found that she wasn't the only women to feel that way in medical school. "It was comforting to read that other women in medical school about the same time had similar experiences."

Healy, a cardiologist and dean of the Ohio State University College of Medicine, was the first female to head the National Institutes of Health.

> *"[Patients] are surprised that I do surgery. Some have even gone to see a male doctor for surgery then come back to me afterwards. That's really frustrating, that perception that girls don't do surgery."*
>
> *Judith Stitt, MD*

Radiation oncologist, Marcia Richards, MD of Milwaukee, agreed there was a propensity among women in medical school to ignore petty instances of discrimination and focus on studying.

"What's referred to as harassment today didn't affect me much then," said Richards, SMS past-president. "It was like water off a duck's back. But today, it's a different generation, one that has come to recognize certain behaviors as offensive and unacceptable. Though it's getting better for women in the medical field, it's worse in other professions. Law, for example. There is more of an 'Old Boys' Club' in law and accounting; much more of a structured ladder, whereas medicine has been very accessible for women recently."

In the past few years, women have been conspicuous by their presence at the higher levels of influence and management, particularly in Wisconsin. Dr. Richards and Pauline Jackson, MD, are former SMS presidents, while Sandra L. Osborn, MD, currently presides. Nationally, the AMA this year named its first female president-elect, Nancy Dickey, MD, of Texas.

You've Come a Long Way, Dr....Maybe

While those interviewed reported that conditions had improved for women in medicine, they admit that gender discrimination continues at a certain level.

The AMA conducted a poll in its Fall 1992 Women in Medicine newsletter. The response from 2,500 readers showed 75% had experienced sexual harassment in medical school, 64% in residency training and 42% in practice. Those who had experienced harassment but did not report the incidents gave reasons such as: 58% said "fear of negative impact," while 46% believed that it was useless because "no action would be taken."

Kathy Bemmann, MD

Marcia Richards, MD

Susan Turney, MD

Patricia Barwig, MD

Dr. Stitt said that even though by the time she was a resident in the late '70s things had gotten better, male bastions still persisted.

"When I was on surgical rotation as a resident, I changed in the nurses' room before going to the OR," she said. "Surgery was still the ultimate 'Old Boys' Club.'"

Stitt pointed out that as much has improved since then, some things seem to never change.

"Recently a senior surgeon showed slides of full frontal female nudity in a grand rounds presentation that had nothing to do with the subject," she said, "so there continue to be overt and covert instances of gender bias."

Today, most organizations at least pay lip service to issues associated with gender as well as other forms of discrimination, if for no other reason than to prevent lawsuits. While acknowledging that gender bias continues to exist in various forms, the women interviewed look at the situation philosophically.

"Biases are one's own perceptions, how each person deals with conflict, how they develop and apply their leadership skills," said Susan Turney, MD, internal medicine physician and administrator at the Marshfield Clinic, and an SMS Delegate to the AMA.

"I guess that I've been fortunate in my career, some opportunities have opened up, some have not. I've never felt either way that it was because of my gender. There still are subtle innuendoes, and sometimes a networking that occurs, but it often has to do with style, or people forgetting to be inclusive rather than being exclusive when making decisions. We tend to gravitate toward people we are most familiar with, based on friendships we have developed."

"It's not necessarily a bad thing that there are differences," said Patricia Barwig, MD, an OB/GYN from Brookfield, "or that there is an 'Old Boy' network. If you view each other congenially, people usually respond appropriately. When I got into medicine, it was my age and marital status that was an issue, not my gender; I was 30 when I started med school and had two kids."

Stitt added that there is one circumstance where gender roles are somewhat more explicit: with patients.

"They expect a woman physician to spend more time with them, to be more empathetic," she said. "And, they are surprised that I do surgery. Some have even gone to see a male doctor for surgery then come back to me afterwards. That's really frustrating, that perception that 'girls don't do surgery.' That's a common discussion with patients in my office. 'Who'll do the hysterectomy?' they ask, and they stare at me when I say 'me.'

"I tell them I'm a full-service gynecologist," she said with a friendly laugh. "I tell them I won a medal at the Sheboygan Fair for knitting."

By the same token, most women seek a female gynecologist. "To me, they should want someone who is competent and empathetic, no matter what their gender. In fact, the OB/GYN who just joined our clinic is male."

Barwig pointed out that women in medicine have some freedom from interference based on gender, because they are in demand from patients.

"In certain fields, like law, doors are opened by the silverbacks," she said, referring to the dominant males in certain species of animals, "who control the keys to

advancement."

"However, this may change in medicine, as doctors are channeled more into HMOs and PPOs, and are controlled less by patient demand and more by bureaucrats."

Still, Barwig said that personally she has not seen much gender discrimination. "Like anyone else, I've had annoying incidents, but these were related to individuals, not sexism. The capability of being a fool is gender neutral. Women can be jerks, too."

Ceilings Made of Glass

As in other areas of society, women in medicine can point to numerous advances, as well as glaring inequities concerning availability of opportunities.

"Sure, a glass ceiling exists in medicine as it does throughout much of society," said Barwig, adding that Wisconsin deserves credit for being a leader in promoting capable women to high positions in medical organizations, and citing the numerous women presidents of the SMS as evidence.

"But there always seems to be a gap in the middle leadership. Just as it takes special effort to get a few women to the top, there likewise needs to be special effort to get women involved in the mid-level range. It is not enough that there are a few high profile women. It will take continued efforts and involvement by women that have to have eye on advancement."

These appointments do not happen by accident she pointed out.

"There needs to be someone in every organization who pays attention to these issues. To point them out as well as to help younger women get up ladder. Jackson has talked about her difficulty in the past of getting on committees. Even as late as the 1980s, women were not getting appointed to committees, in many instances if they were, it was as a 'token' woman.

"Then, if women were to volunteer, rather than be asked to join a committee, they ran the risk of being identified as 'pushy.' But it's a fine line; to get considered for certain positions, women have to promote themselves, which is sometimes perceived as being aggressive."

> *"As more women join the medical ranks, we should take our share of leadership opportunities. I'm not sure it's happening yet."*
>
> *Marcia Richards, MD*

For some female physicians, choosing where you practice can have something to do with how well you advance.

"We have a good track record here," said Turney of Marshfield. "When leadership positions open, applicants are treated fairly; the best person gets the job. We don't get a lot of women applying here; it's a matter of geography, being in a small town in rural Wisconsin. But the experience for me has been positive.

"I am seeing more women getting involved in medical organizations and specialty societies, as trustees and presidents. Maybe I'm just coming along at the right time. I don't see gender as a big barrier. If there are more men than women in professional meetings, I see it not as a bias, but as circumstance."

As the number of women physicians increases, so will the concomitant leadership opportunities and responsibilities; in theory, that is.

"This is already happening in certain specialties, such as pediatrics and OB/GYN," added Barwig. "But it's important in medical schools to develop leaders" in all areas.

While the number of women enrolled in medical school has increased, and the ratio of practicing physicians in the general community has grown as well, the rise to senior appointments has not.

"The higher you go up the academic ladder, the fewer the women," said Stitt, professor of human oncology at the UW Comprehensive Cancer Center in Madison. "To an extent, I think the same can be said for the lack of women in the higher echelons of the business of medicine."

According to the UW Medical School Faculty Equity and Diversity Committee Year-End Report (1996-97), "The proportion of women to total faculty has not shown significant growth, nor is growth evident when shown by track at each rank...The percentage of majority women at the assistant professor level

has decreased from 32.7% in 1988 to 24.3% in 1996..."

"Obviously, we have to do more to retain junior women and minority faculty," said Judith Leavitt, MD, Associate Dean at UW Medical School, who along with Stitt is on the committee.

"The female faculty has grown over the last eight or nine years, but we are still behind where we should be. What the statistics don't show is that although we are promoting junior women faculty members, they are leaving" for other institutions or the private sector.

Leavitt added that she sensed from colleagues around the country that UW Medical School is "pretty typical" when compared to other medical schools in retaining and promoting women faculty, and in attempts to attract young medical professionals in choosing academic medicine as a career alternative. She also pointed out that for the first time in the history of the university, the medical school has three female associate deans, of whom she is one.

"We are trying to address issues of the gender and race climate here. For instance, we are instituting a monthly breakfast for faculty women, and strengthening the mentoring program. In addition to a departmental mentor, each junior faculty member will have a mentor from elsewhere in the medical school.

"Also, we are developing a series of programs to help them develop skills, such as in making presentations, grant writing, talking with the media, etc. And, we are encouraging search committees to be sensitive to certain issues. For example, women candidates are sometimes slower to publish because they have been having children."

Where to Get More Information or Assistance Concerning Women's Health Issues:

American Medical Women's Association
801 N. Fairfax St., Suite 400
Alexandria, VA
(703) 838 0500
Contact: Eileen McGrath
e-mail: *info@amwa-doc.org*
website: *http://www.amwa-doc.org*

American Medical Association
Women in Medicine Services Office
515 North State Street
Chicago, IL 60610
(312) 464-4392
Contact: Phyllis Kopriva, e-mail: phyllis_kopriva@ama-assn.org

Women's Health Special
New York Times on the Web
website: *http://www.nytimes.com/women* or, as a hypertext link from WISMED: www.wismed.com/

Women's Health in the Curriculum, A Resource Guide for Faculty
Available from the National Academy of Women's Health Medical Education (NAWHME)
(215) 762-4260

Society for the Advancement of Women's Health Research
website: *http://www.womens-health.org*

Woman and Cancer: NCI
CancerNet
website: *http://cancernet.nic.nih.gov*

National Osteoporosis Foundation
1150 17th St. NW
Suite 500
Washington, DC 20036
(202) 223-2226
website: *http://www.nof.org:80*

Families and Career Flexibility

Though it hasn't been easy, women physicians continue to find ways to have both a family and a professional life. Years ago, it was actively discouraged during training; today, medical schools are more flexible and sometimes innovative in helping student-parents of both genders balance the rigors of medical training and potty training.

When Richards had her daughter while enrolled in medical school in the 1960s, "it was hell. Many suggested at the time that I quit."

She added that it was no picnic for fathers in medical school either.

"But it's getting more family friendly today. We've stressed people for too long. We've found that women don't have to be superwomen to be good doctors," Richards added.

"We are starting to see more flexibility, job sharing, going part-time, less typical hours. This is good, and terribly important. If not, physicians will suffer burnout, and in the end, patients will suffer."

Stitt said she survived having a son and daughter while in medical school because of a supportive spouse and family.

"Both of us worked, so we could afford live-in child care," she said, though she admitted that all she did was "work, study and take care of kids. Some things got shorted. If the opportunity was there at the time, I would have taken longer to get through school. But that's not just a woman's issue."

Stitt mentioned a recent incident that exemplified how much things have changed since she was in medical school. During a discussion, a young male physician said he needed to leave to take his son to a doctor's appointment.

"As a woman, I wouldn't have said that. But it indicates that, to this man, it's okay to have family life be part of work and make it public," said Stitt. "I did many things with my family, but in private. There was no such thing as time off for family and child-bearing. No part-time med school or special class arrangements then. Now, it's okay to take kids and family into consideration."

One family did something even less traditional.

"We decided that one of us should stay home with our two kids, who were a year apart," said Susan Turney, who finished medical school in 1979. "My husband Pete agreed to be a full-time parent for what we thought would be a short period, maybe two years."

It ended up being ten.

"The kids were well into grammar school before he went back to work part-time," continued Dr. Turney. "He did a nice job and it was very nice having a full-time parent at home. He was happy doing it and I was happy that we could make that choice financially and personally. A lot of men told us that they wished they could do what Pete was doing, though some were a little uncomfortable with it."

The alternative arrangement had another effect. A neighbor's son who used to baby-sit for the kids wrote a paper in school on what he wanted to be when he grew up: "He wrote that he wanted to be like Pete Turney," recalls Turney.

Families and Career Flexibility

Balancing the physical and emotional demands of child-bearing and child-rearing with professional responsibilities may be the most difficult challenges women physicians face, especially during intense years of residency training. Of course, this has not stopped women from pursuing both families and medical training.

- Two-thirds of women physicians responding to an AMA survey in 1983 had at least one child, and almost half had their first child during residency training.
- Of 64% of doctors responding to a national survey in a 1985 edition of the *Journal of Medical Education*, 43% had their first child during residency and 13% during a fellowship.
- Twenty-nine percent of residents were pregnant at least once during residency, according to the American Medical Women's Association in 1991.
- Just under 17% of community hospitals and 35% of teaching hospitals surveyed by the AMA said they offered child care services.

AMA Guidelines for maternity leave include:
"...as women continue to enter medicine in increasing numbers, the incidence of pregnancy and maternity leave will become more frequent and predictable. It is in the best interest of all concerned that accommodations be made to assure that these women do not have to forsake their child-bearing years in order to pursue a successful medical career."

The AMA has also adopted policy on paternity leave:
"...As the health caretakers of the public, physicians and the medical profession should set the tone for equality by developing parental leave policies for the profession that accommodate the needs of both parents."

Advocates for Women's Health, Education

While many women physicians juggle their schedules to accommodate family and career, Richards urges that they reserve time for what she considers a vital role.

"Leadership," said Richards. "As more women join the medical ranks, we should take our share of leadership opportunities. I'm not sure it's happening yet. It is vital that we give of our time to influence the ways patients receive care. This affects decisions not only concerning their own health care institutions or clinics, but also managed care, treatment and research."

Domestic Violence

Women physicians play a key role in identifying, preventing and treating victims of domestic violence which affects millions of men, women and children in the U.S. annually. Domestic violence, according to the AMA:

- Touches 25% of all American families.
- Involves 6 out of every 10 couples.
- Will involve half of all adult women as victims —more than once.
- 1.8 million women are beaten by male partners annually.
- 8 to 11% of women report being physically assaulted during pregnancy.
- Kills as many women every five years as Americans killed in the Vietnam War.
- Is responsible for one-third of all female murder victims.
- Is the single largest cause of injury to women in the U.S., more common than:
- car accidents, muggings and rapes.
- Creates 100,000 hospitalization days annually.
- Creates 30,000 emergency room visits annually.
- Creates 40,000 trips to the doctor's office annually.
- Leads to 35% of visits by women to hospital ERs seeking treatment for on-going abuse, but only 5% of domestic violence victims are identified as such.
- Costs the nation perhaps as much as $5 billion annually in lost productivity due to absenteeism.

Source: AMA 1996

Richards said that women physicians need to find the time to be involved in the structure of medicine, at any level, to separate the profession from the role of hourly worker.

"I fear we will have too many 'blue collar doctors,'" she said. "if we don't find time to give back. To do so, we should tithe 10% of our time in non-reimbursable efforts to the community or by serving on committees. If not, women will lose out on the opportunity to lead as well as sway contemporary issues, such as how health care is delivered, ease of access, concern for women and children from their perspective. Men and women each bring something to the forefront; not necessarily exclusively because of gender, but because of different viewpoints.

"Women doctors need to be there to remind American women of issues concerning heart disease, smoking, colon cancer, obesity, all major health concerns," said Richards. "Women doctors can bring a better balance concerning what is needed to address these issues."

Kathy Bemmann sees this role as crucial to successfully addressing women's health issues. As a former breast cancer patient, past-president of the American Medical Women's Association and a physician, Bemmann is "very definitely active in promoting" policies for women's health.

"One key AMWA issue is funds for research on women's health issues that have been ignored or not well researched," she said. "Males tended not to understand certain issues as well. A woman patient once said that going to a male gynecologist is like going to a mechanic who has never owned a car. Nothing hostile about this statement. It's just fact."

Access to health care issues concerns old and young women alike, according to Dr. Stitt, specifically, young, poor women with children and older women on fixed incomes.

"Older women are living longer. Medicare programs are primarily elderly women programs; of the 32 million on Medicare, 19 million are women. Since they outlive men by seven years, there is greater need for more chronic care for women, more nursing-home time. These costs will continue to grow. Who is going to pick up these costs?

"Women grow more impoverished after the death of their spouse. It's also true that older women who have lower incomes are less likely to receive preventive care because they can't afford the co-pay. These are all serious issues we have to address."

This includes more research and treatment for breast cancer, ovarian cancer, urinary and bladder problems, stroke and heart disease, as well as associated social concerns such as accessibility of health care for mothers and children,

domestic violence, reproductive choice, and contraception.

"Women are at greater risk than previously thought due to the role of estrogen, and that problems occur at an older age," said Bemmann. "Due to the size of blood vessels, there are different problems for laser surgery and angioplasty."

Nearly every system in the female body has been affected by issues of stereotyping and discrimination, she added. "Women have been excluded from research historically for a variety of reasons."

Though women have come a long way in medicine, there is still a long way to go. Dr. Richards pointed out the need for devoting time to participation and leadership, as a way to foster appropriate medical standards to meet the changing needs of the patient population, particularly of women and children.

Dr. Stitt promotes the need to make medical school more relevant for female students. "UW now offers a fellowship in Women's Health, a lecture series on women's health issues, and is beginning to incorporate a whole new arena of medical care and preventive care and how they affect women into the curricula."

Dr. Bemmann added that The Medical College of Wisconsin in Milwaukee has a strong Women Faculty Committee in place, as well.

"Institutions now have policies in place to address issues of gender bias," she said. There is also help available from professional organizations. "We have a hotline at the AMWA for discrimination. One interesting area is peer review. Just because a woman may do something differently, it may be perceived as wrong by a male reviewer. It's where the battle is at this point."

Bemmann's advice to women who continue to confront this type of bias or other discrimination? Don't get mad, get busy.

"Sure, it's been aggravating at times" over the years, she said. "Everyone has horror stories. But action is a great antidote to anger. That's what has gotten me through. One thing is for certain: the interesting times are not over."

Access to Health Care for Mothers, Children and the Elderly

These issues concern female medical professionals for obvious reasons:

- Some 9 million women of child-bearing age lack health insurance mainly because women are likely to earn less, work in jobs that do not provide health benefits or depend on a spouse whose benefits do not cover her.
- Women aged 45 and older are more likely than men the same age to lack insurance. They are more often unemployed, work part-time or lose coverage when they are widowed or divorced.
- Since women live longer than men, and have more chronic illnesses, they make up most of the residents in nursing homes.
- Women are usually the care givers for elderly or disabled relatives.

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WISCONSIN MEDICAL JOURNAL

Lessons Learned from a Mentoring Program for Teenage Mothers

Kathyrn Klein Havens, MD; David A. Wagstaff, PhD; Patricia A. Mercer, PhD; Kathy Longeway, PhD; and Mary Gutman, PhD

Purpose: This study evaluated a mentoring program designed to decrease the risk of repeat pregnancy among unmarried primiparous teens, ages 12-19.

Methods: Adolescents (n=110) completed a battery that assessed sexual/contraceptive behavior; psychological adjustment; and attitudes towards school. Teens were then randomly assigned to a mentor or control group, and reassessed at 6, 12, 18, and 24 months. Mentored teens received social support and assistance dealing with community agencies from mentors who were trained community volunteers.

Results and Conclusions: At baseline, mentor and control teens had similar sexual histories, school achievement profiles (percentage enrolled, cumulative grade point average), and anticipated being the same age when they had a second child. At 24 months (n=81), most mentor and control teens were making progress in school. Fifty percent had graduated or had advanced two grades; 10 of the 16 graduating teens were seeking additional education. However, the mentoring program did not significantly impact repeat pregnancy rates. At 33 months, 66.0% of the mentored teens and 68.8% of the control teens had experienced a repeat pregnancy. Thirty-six percent of teens had one repeat pregnancy; 24% had two or more pregnancies. Sixty-two percent of the pregnancies with known resolution (89) resulted in live births; 26% were aborted. In providing this mentoring program, several important lessons were learned.

Key Words: Adolescents, Repeat pregnancy, Mentor program

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The bond that develops between mentor and teen is the key feature of a mentoring program for adolescents. Indeed, this bond is the heart of the supportive relationship that develops between the teen and the mentor. Although it is believed that mentors give pregnant teens the support that teens need to change their attitudes and behavior, there have been few formal evaluations of mentor programs for pregnant teens.[1,2]

The Milwaukee Collaborative Teenage Pregnancy Prevention Program (MCTPPP) was developed to expand upon and evaluate a local mentor model that had been quite successful with 100 young girls between the ages of 10 and 14. However, MCTPPP differed from its predecessor in two critical respects. First, MCTPPP participants lived throughout the city; they did [not] live in the

housing development in which the sponsoring social service agency was located. Second, MCTPPP participants were older and pregnant with their first child when they were enrolled.

THE MENTOR PROGRAM

MCTPPP was a two-year program that began January 1, 1988 and ended May 31, 1990. Its primary objective was to decrease the risk of repeat pregnancy among participating unmarried primiparous teens, ages 12-19. The program assumed that the mentor would serve as a role model, an information/education resource, and a source of social support for the teen and her family. MCTPPP was a joint venture of a medical school, an urban hospital and a community-based, minority-operated social service agency.

Initially, staffing of the mentor component consisted of the director of the social service agency and a Volunteer Coordinator. The latter, an experienced social worker, was responsible for the day-to-day operation of the program. She also recruited mentors, conducted the six-week mentor training program and quarterly training meetings, and served as the mentor's mentor. When it became apparent that the Coordinator needed assistance, a part-time social worker was hired to work with the families, make home visits, and serve as a resource person for the teens, their families, and the mentors.

In the first year, mentors were recruited using small media (e.g., bus signs, brochures, posters) and word-of-mouth. Mentors were recruited subsequently through word-of-mouth and personal contact. Each woman had to complete a written application and interview that were used to assess her experience, availability, knowledge of community resources, commitment to working with the teen's family, and birth control attitudes.

The six-week mentor training program consisted of 20-hours of classroom work and 5- to 10-hours of homework. The training emphasized the mentor's role as a source of support and resource for the teen, her family, and her siblings; identified available community resources and taught the mentor how she and her teen could access them; provided mentors with the knowledge they needed to discuss health care and contraception with their teens; and emphasized the importance of commitment and confidentiality. Quarterly training meetings were used to enhance the mentor's basic training and to deal with any problems she was experiencing. These meetings also allowed mentors to receive support from other mentors, the Volunteer Coordinator, and the Social Worker.

Mentors were expected to spend a minimum of twelve hours each month with their teens. It was anticipated that these hours would be spent initially on telephone conversations and social outings (e.g., movies, shopping, eating out, visits to each other's homes). During the initial encounters, mentors were expected to develop relationships with their teens that fostered trust and friendship. As the relationship developed, mentors were expected to devote more time working with their teens on goal setting; to spend more time talking about contraception, continuing in school, daycare, parenting, and budgeting; and to spend more time helping their teens deal with problems.

Mentors were paid $125 for completing the six-week training program and $25 for attending each quarterly training meeting. In addition, they were given $100 for each month they spent 12- to 24-hours with their teens, and they were given $150 for each month they spent more than 24-hours with their teens. Mentors could claim up to $50 per month as reimbursement for theater tickets, meals, and so on.

By project's end, 57 women had served as mentors. The mean age was 35.9 $\pm$ 8.7 years (mean $\pm$ standard deviation) (n=52); the youngest mentor was 21.5 and the oldest mentor was 57.3. The majority were African-American working women. They had lived in Milwaukee for 18.3 $\pm$ 11.8 years (n=50). Thirty seven mentors had children; 43% (16/37) had their first child when they were teenagers.

To participate, a teen had to be unmarried and in the third trimester of her first pregnancy. Fifty-two (47%) teens were recruited through an alternative school for pregnant teens; 40 (36%) teens were recruited through the hospital's obstetrics clinic; and the remaining 18 (16%) teens were recruited through community health centers and private physicians.

Ninety-one percent (100) of the teens were African-American, 5.4% (6) were White, 1.8% (2) were Hispanic, and 1.8% (2) were Native American. Seventy-five percent were insured through

Medicaid. The mean age at enrallment was 16.5 years; the mean age of menarche was 12.2 years; and the mean age far first intercaurse was 14.3 years. Seventy-six percent experienced their first intercaurse between the ages of 11 and 13. Althaugh 29% used birth contral the first time they had intercourse, 41% had never used birth contral priar ta their first delivery. During the study period, all teens reparted using birth cantral at some time. In most cases, the teen's physician prescribed aral contraceptives befare she was released from the haspital.

MENTOR-TEEN MATCHES

Teens were formally matched by the Valunteer Caardinatar. The match was made after the Valunteer Caardinator (or Sacial Warker) met with the teen and her mather/family, and after the Valunteer Caordinator and Social Warker had abserved the mentar in the training program. Fifty-eight percent (30) were successfully matched with ane mentar wha warked with her teen far the entire twa-year period; the remaining teens (22) were matched with two or three mentors. (One teen declined further participatian shartly after she was assigned ta the mentar group.)

STUDY DESIGN

To evaluate the pragram, 110 teens were recruited and randomly assigned to the mentored group (n=53) ar the cantral graup (n=57). The teens assigned to the cantral graup received assistance fram cammunity agencies and social suppart from family and friends. A black randamization pracedure was used ta ensure that the two graups were camparable with respect ta age at enrollment and recruitment source. The study pratacal was appraved by the haspital's Institutianal Review Baard and dacumented infarmed cansent was abtained from each teen when she was recruited.

Teens were interviewed at baseline (during the third trimester) and asked ta return ta the haspital research site and complete additianal interviews at 6, 12, 18, and 24 manths pastpartum. The interviews were canducted by a trained psychametrician and taak ninety minutes an average. They pravided self-repart data on repeat pregnancy, educatianal autcames, and the teen's psychalagical adjustment. Questionnaire items and scales were taken fram existing instruments.[3-12]

Eighty-seven percent completed the 6-manth interview; 80% campleted the 12-manth interview; 77% campleted the 18-manth interview; and 74% campleted the 24-manth interview. In addition to these structured interviews, we abtained medical and psychosacial data fram the teen's physician and from the mentars.

Toble 1. Selected Boseline Chorocteristics

	Mentor	Control
Ethnicity		
White'	3 (5.7)	3 (5.3)
Block	47 (88.7)	53 (93.0)
Hisponic	2 (3.8)	
Notive Americon	1 (1.9)	1 (1.8)
Enrolled (yes)	52 (98.1)	53 (93.0)
Foiled o Grode (yes)	29 (54.7)	28 (49.1)
Lost Grode Attended		
7th grode	1 (1.g)	
8th grode	5 (9.4)	7 (12.3)
9th grode	13 (24.5)	14 (24.6)
10th grade	11 (20.8)	11 (19.3)
11th grade	12 (22.6)	14 (24.6)
12th grode	7 (13.2)	10 (17.5)
GED Progrom	3 (5.7)	1 (1.8)
Missing	1 (1.g)	
Grode Point Averoge	2 2.1 ± 0.7, 41	2.2 ± 0.7, 49
Teen's Age ot		
First period	12.1 ± 1.4, 52	12.4 ± 1.5, 57
First intercourse	14.6 ± 1.8, 53	14.6 ± 1.5, 57
First use of birth control	15.1 ± 1.6, 29	15.1 ± 1.2, 34
First birth	16.6 ± 1.3, 53	16.6 ± 1.4, 57
Mother's oge ot First birth	17.7 ± 2.5, 48	17.0 ± 2.8, 55
Age of Boby's fother	18.6 ± 2.6, 52	18.6 ± 2.4, 57
Desired Age ot second birth	25.6 ± 3.3, 25	24.3 ± 3.3, 28

1. Frequency (Percent)
2. Meon ± Stondord Deviotion, N

STATISTICAL ANALYSES

Chi-square tests were used ta assess differences between propartians and ta campare distributions

Table 2. Repeat Pregnancy and Schaal Advancement

	-Mentar (n=53)	Cantral (n=57)
Repeat Within 33 Manths	66.0% (33/50)	68.8% (33/48)
Number af Repeat Pregnancies[1]		
0	17 (34.0)	15 (31.2)
1	20 (40.0)	20 (41.7)
2	12 (24.0)	11 (22.g)
4	1 (2.0)	2 (4.2)
Unknawn	3	9
Mean Number af Repeat Pregnancies[2]	0.96 ± 0.88 50	1.04 ± 0.97 48
Schaal Advancement		
Graduated ar Advanced 2 grades	28 (52.8)	27 (47.4)
Delayed	15 (28.3)	14 (24.6)
Drapped Out	5 (9.4)	7 (12.3)
Missing	5 (9.4)	9 (15.8)

1. Frequency (Percent)
2. Mean ± Standard Deviatian, N

(e.g., to determine if the mentor and control groups differed with respect to the distribution of repeat pregnancies). Student's t-test was used to test mean differences based on continuous measures. Separate repeated measures analyses of variance were used to assess group differences and time trends for the psychological adjustment measures. A difference was judged to be statistically significant if the associated p-value was less than .05.

RESULTS

As Table 1 shows, mentored teens did not differ from control teens with respect to race, school performance (percentage enrolled, percentage ever failing a grade, last grade attended, cumulative grade point average), or sexual history (age at menarche, age at first intercourse, age at first use of birth control, age at first birth). Mentor and control teens also did not differ with respect to the age they wanted to be when they had a second child.

Sixty percent of the teens (n=110) experienced at least one repeat pregnancy within 33 months of her first live birth: 36% of the teens had one repeat pregnancy, and 24% had 2 or more repeat pregnancies. The teens who had a repeat pregnancy did not differ from those who did not with respect to age at first intercourse, age at first birth, and age at first use of birth control. As Table 2 suggests, the mentor and control groups did not differ with respect to the overall proportion experiencing a repeat pregnancy, the distribution of repeat pregnancies (none, one, two or more repeat pregnancies), or the mean number of repeat pregnancies. Due to relocation, we could not determine the status of three of the mentored teens and nine control teens; and because of the nature of our data, we could not determine if the two groups differed with respect to the timing or spacing of the various pregnancies. By 33 months, we knew of 98 repeat pregnancies; of the 89 pregnancies with known resolution, there were 55 live births, 23 abortions, 9 miscarriages, and 2 stillbirths.

At baseline, 96% of the teens (n=110) were in school and three were enrolled in special education programs. The teens (n=109) performed below grade level on the Wide Range Achievement Test (WRAT), a standardized measure of school achievement.[7] The mean math score was 85.4 ± 12.2 (low average) and the mean reading score was 79.3 ± 14.1 (borderline delayed). At 24 months (n=81), the data suggested that most teens were making progress in school even though they had a child. Furthermore, the mentor and control groups did not differ with respect to the proportion graduating or advancing in school (Table 2). Fifty percent of the (n=110) teens had graduated or had advanced two grades; and 10 of the 16 teens who had graduated were enrolled in a vocational school, trade school, or college. The high percentage of teens advancing in school may reflect the fact that 52 teens were recruited from an alternative school that emphasized the importance of a high school diploma. It is also likely that the school's daycare center may have contributed to the high percentage of teens making progress in school.

The Piers-Harris Self-Concept Scale,[5-6] the Nowicki-Strickland Locus of Control Scale,[8] and the Beck Depression Inventory[9-10] were administered to determine if pregnant teens suffer from low self-esteem and a degree of psychological distress that intensifies after they become parents.

All of the observed group means on the Piers-Harris were above average, approximately in the 70th percentile. More importantly, no mentor-control mean difference was statistically significant. Similarly, the observed group means on the Nowicki-Strickland fell within the normal range, and no mentor-control mean difference was statistically significant. Finally, the observed group means on the Beck Depression Inventory suggested a mild depression early in parenting which was resolved by 12 months postpartum. No mentor-control mean difference was statistically significant.

DISCUSSION

In this randomized study, we found no significant difference in the pregnancy rates of mentored and control group teens. Our 60% repeat pregnancy rate was much larger than that typically reported. Project Redirection, a program that compared experimental and control groups and made use of community volunteers, reported that 50% of youth from both groups experienced a repeat pregnancy within 24 months.[2] In their review, Pitman and Adams[13] concluded that 37.8% of females, 15 to 19, experienced a repeat pregnancy within 24 months. In a more detailed study of national data, Mott[14] found that 22.7% of females, 19 or younger, experienced a repeat pregnancy within 24 months and that 43.3% of females, 19 or younger, experienced a repeat pregnancy within 36 months.

Our 50% school completion/advancement rate may be lower than that reported in the literature. Pittman and Adams[13] estimated that 61.1% of teen mothers, 15 to 19, complete high school by ages 20 to 26. Using data from three separate national surveys of women, Upchurch and McCarthy[15] concluded that high school completion was the norm by 1986 even though completion rates varied by race and social class.

There are at least three explanations for our findings. First, our mentoring program may have truly had no impact on repeat pregnancy or educational outcomes – the domains we targeted. The failure to find anticipated group differences may be due to an inadequate theoretical model, faulty implementation, or both. We believed that our teens needed a role model whose struggles and achievements exemplified the belief that life offers options that are within one's grasp. Life options and mentoring programs are still sufficiently new such that formal program evaluations have yet to be reported in the literature.[1] From the reports of both mentors and teens it was clear that some mentors experienced great difficulty maintaining contact with their teens, and that some teens moved frequently, were unable to maintain continuous telephone service, or simply did not wish to do things with the mentor. Thus, it is possible that the mentored teens did not receive sufficient mentoring.

Perhaps, related to the difficulty of maintaining physical contact is the difficulty mentors had discussing sexuality and contraception with their teens. During their "exit" interviews, when asked to reflect upon their experiences, mentors most frequently recalled discussing with their teens the importance of education, school and relationship problems. In contrast, mentors seldom documented in their logs or problem lists any discussions of sexuality or contraception. Despite their training, our mentors were unprepared to initiate personal conversations that most often occur in a recognized social context between the teen and her mother, the teen and her doctor (or minister), or the teen and her best friend. This role ambiguity may have contributed to the mentor and teen's inability to engage one another on such sensitive topics.

Second, the mentoring program we implemented may have had an impact; however, the effects may have been subtle or the effects may appear at a later date. The applicant interview data suggested that some women volunteered as mentors because someone from their community had taken an interest in them when they were young. Thus, it is possible that volunteerism at a future date may be one of the ways the mentor experience would affect the teens. It certainly impacted the mentors themselves. While they were mentors, 45% of all mentors reported returning or completing advanced educational degrees and/or upgrading their jobs.

Third, it may be that the control group teens received support from their immediate families, relatives, boyfriends, and friends that was comparable to the support that mentored teens received from their mentor, and their immediate family, relatives, boyfriends, and friends. Underlying this

explanation is the hypothesis that mentor and control group teen mothers experienced similar, basic needs which were met by the teens distributing the needs to the different resources for action.

In providing a pregnancy prevention program for primiparous, unmarried teens, we learned several important lessons. First, we learned that the teen has to want to have a mentor. We chose to assign teens at random; however, mentored teens who did not want a mentor did not have to meet with her, and control teens who wanted a mentor found one. Second, we learned that we do not yet know how to provide mentors with the knowledge, language, and skills needed to talk with teens about sexuality and contraception. Mentors and teens did talk about school and they did talk about boyfriends and relationships. However, they seldom talked about sex, a behavior that is far more private and personal. In hindsight, our mentors had the difficult task of negotiating a role that does not yet exist in most social networks: as teens, few of us talked about intimate matters with an individual who was not our parent or grandparent, a friend, relative, physician, or teacher. Finally, we learned that individual, intensive mentor-teen bonds may be less effective in preventing undesirable outcomes than multiple, diffuse social bonds. In MCTPPP's predecessor, the teens participated weekly in a neighborhood support group and talked with other teens about contraception, their feelings about becoming pregnant and starting a family, and any problems that they were having with family members and friends. It was our hope that the mentor relationship in MCTPPP would allow similar discussions.

If applied research is to inform program design and social policy, applied researchers must learn from their efforts. As policy makers turn their attention to welfare reform and adolescent parenthood, we hope that they take a detailed look at the substance that underlies past and current pregnancy prevention efforts.

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REFERENCES

1. US Cangress, Office af Technalagy Assessment, Adalescent Health – Valume II: Backgraund and the Effectiveness af Selected Preventian and Treatment Services, OTA-H-466. Washingtan, DC: U.S. Gavernment Printing Office, 1991.
2. Hayes CD, ea., Risking the Future, Val 1: Adalescent Sexuality, Pregnancy, and Childbearing. Washingtan, DC: Natianal Academy Press, 1987.
3. Natianal Center far Health Statistics, Natianal Survey af Family Grawth, Cycle IV: Questiannaire. Washingtan, DC: US Public Health Service, 1984.
4. Harris L & Assaciates, *American teens speak: Sex, myths, TV, and birth contral.* Yark, NY: Lauis Harris and Assaciates, 1986. (Capyright 1986 Planned Parenthaad Federatian af America, Inc.)
5. Piers EV, Manual far the Piers-Harris Children's Self-Cancept Scale. Nashville, TN: Caunselar Recardings and Tests, 1969.
6. Piers EV, The Piers-Harris Children's Self-Cancept Scale: Research Managraph Na. 1. Nashville, TN: Caunselar Recardings and Tests, 1977.
7. Jastak S, and Willcinsan GS, Wide Range Achievement Test, Level 2. Wilmingtan, Delaware: Jastak Assaciates, Inc., 1984.
8. Nawicki S Jr, and Strickland BR. A lacus af cantral scale far children. *Journal of Consulting and Clinical Psychology* 1973; 40: 148-154.
9. Beck A, Ward CH, Mendelsan M, Mack J and Erbaugh J. An inventary far measuring depressian. *Archives of General Psychiatry* 1961; 4: 561-571.
10. Beck AT and Steer, RA. Manual far the Revised Beck Depressian Inventary. San Antania, TX: Psychalagical Carparatian, 1987.
11. Kavacs M. The Children's Depressian Inventary. *Psychopharmacology Bulletin* 1985; 21: 995-998.
12. Scatt K, Field TM, and Rabertsan KG, eds., Teenage Parents and Their Offspring. New Yark: Grune and Strattan, 1981.
13. Pittman K, and Adams, G, Teenage Pregnancy: An Advacate's Guide ta the Numbers. Washingtan, DC: Children's Defense Fund's Adalescent Pregnancy Preventian Clearinghause, 1988.
14. Matt FL. The pace af repeated childbearing amang yaung American mathers. Family Planning Perspectives 1986; 18: 5-12.
15. Upchurch DM, and McCar~y J. Adalescent childbearing and high schaal completian in the 1980s: Have things changed? *Family Planning Perspectives* 1989; 21: 199-202.

Varicella in Pregnancy

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The SMS Maternal Mortality Study Commission was established to pursue two goals. The first goal is to collect, verify, and analyze data concerning maternal deaths in Wisconsin. The second goal is to use the data to direct continuing education efforts.

This discussion of varicella (chicken pox) in pregnancy was prompted by a maternal death caused by varicella pneumonia. This article provides practical details regarding prevention, treatment and counselling for each of the common clinical presentations of varicella in obstetrical practice.

HEALTHY WOMAN PRESENTING FOR PRECONCEPTIONAL COUNSELLING OR FIRST PRENATAL VISIT

The focus in this situation is primary prevention through vaccination or confirmation of pre-existing immunity.

As of March of 1995, an attenuated live varicella virus vaccine is available in the U.S. (Varivax®, Merck and Company). The American Academy of Pediatrics recommends chicken pox vaccine for all children between 12- and 18-months of age who do not have a history of chicken pox. Use of this vaccine in childhood should reduce the number of exposures to pregnant women. Non-immune women of reproductive age can also be offered this vaccine in the same way that we now offer rubella vaccine. Children and adults should receive two vaccine doses four to eight weeks apart. The vaccine is highly effective in preventing or attenuating clinical illness for up to five years. Immunity beyond five years has not been well studied. Because this is a modified live virus vaccine, pregnancy should be avoided for one month following each injection. Adverse effects of the vaccine are minimal. Further details are included in the package insert or in a recent *CDC Morbidity and Mortality Weekly Report.*[7]

If a woman has a positive history of chicken pox, she is considered immune,[7] particularly if her parent confirms that history. A question about a history of chicken pox should be included during preconceptional counselling and at the initial prenatal visit. Women with a negative or equivocal history should have blood drawn to determine immunity to varicella. Laboratory request forms from the Wisconsin State Laboratory of Hygiene have a specific box to check for "Varicella IgG Immune Status." The current test used by the state laboratory is designed to detect immunity from either vaccine or natural infection. Because the vaccine may not be as immunogenic as past natural infection, patients who have been vaccinated should have serologic testing for immunity when they present for a preconceptional or first prenatal visit. Non-immune pregnant women can receive the vaccine after delivery, even when they are breastfeeding.[7]

A NON-IMMUME PREGNANT WOMAN EXPOSED TO CHICKEN POX

This is usually the woman who does not recall having had chicken pox and who is then exposed during pregnancy. To err on the safe side for the time being, this should also include the woman who has been vaccinated but then is exposed to varicella during pregnancy. To assess the significance of exposure it is useful to know that a person with chicken pox is infectious from two days before the appearance of typical lesions until five days after the vesicles crust over.

This woman might benefit from Varicella Zoster Immunoglobulin (VZIG). Rather than administering VZIG in all cases, it is better, if possible, to first determine the woman's immune status. This is because 85% of adults who do not recall having chicken pox, nevertheless, have protective antibody levels. The best way to get a patient's immune status determined in an urgent situation is to take three steps. First, one should

telephone the viral serology unit of the Wisconsin State Lab of Hygiene (608-262-0248) to alert them of the need for special testing. This lab can provide same-day results if the specimen is received by noon, so the second step is to make special arrangements for transportation of the specimen. Thirdly, tell the lab the phone number and contact person to call with the results. Remember that the patient's serum must be collected within 10 days of the earliest date of exposure. Only then can it be determined if the antibody detected is an indication of protection from prior exposure vs. antibody response to the current exposure.

VZIG is expensive (approximately $400 for the usual adult dose) and is not stocked in local pharmacies. However, it can be obtained within 24-hours by contacting one's local blood bank, which can in turn obtain the drug from its supplier within the state of Wisconsin.

VZIG must be given within 96 hours of exposure, so time is of the essence. It does no good to give VZIG after the onset of symptoms. Studies have shown that VZIG reduces rates of clinical varicella in exposed persons, but there is no indication that it prevents adverse fetal effects. Thus, VZIG's only purpose is to prevent or reduce the severity of illness in the mother. Severe adverse effects of VZIG are extremely rare.[7]

A PREGNANT WOMAN WITH CHICKEN POX

Suppose a pregnant woman phones you urgently to say she has just broken out with chicken pox. First of all you must remember to keep her out of your crowded waiting room. Instead, counsel her briefly over the phone and then arrange to see her in an isolated space with only varicella immune medical staff in attendance. Clinical findings are almost always sufficient to make the diagnosis. Fever, malaise and a pathognomic rash appear 10 to 21 days after exposure. The characteristic skin and mucous membrane lesions arise in successive crops over three to five days. Red macules progress to become papules, then vesicles, then crusts. Varicella, otherwise known as chicken pox, is the name given the primary infection by varicella zoster, a herpes virus. It is this primary infection that can be fatal to the mother and teratogenic for the fetus. This virus, like other herpes viruses, exhibits latency. This means that after a primary infection, virus lingers undetected in sensory nerve ganglia and can cause recurrent disease. The recurrence is called herpes zoster or shingles and consists of confluent skin lesions distributed along the path of one or more sensory nerves. Herpes zoster during pregnancy has not been associated with any congenital abnormalities. However, zoster lesions are infectious for susceptible contacts.

The pregnant woman with chicken pox needs counselling as to the risks of the disease to her and her unborn baby and advice regarding the safety and efficacy of available therapy. Therefore, we will first discuss what is known about the fetal and maternal risks of chicken pox during pregnancy. The most dangerous maternal complication is varicella pneumonia as exemplified by a recent maternal death in Wisconsin. Adverse effects on the unborn baby are manifested as direct damage to fetal tissues or as premature labor and delivery.

The teratogenic effects of varicella zoster virus are seen with maternal primary infection during the first 20 weeks of pregnancy. The attributable defects are collectively termed varicella syndrome and include limb hypoplasia, dermatomal skin scarring, and ocular and CNS abnormalities (e.g. microcephaly, chorioretinitis, cataracts). Although the effects can be severe, they are indeed, quite rare. The results of the largest prospective study in the literature serve as a basis for counselling. From 1980-1993, 1,373 women in the United Kingdom and Germany were followed prospectively after developing chicken pox in the first 36 weeks of pregnancy.[5] Varicella was confirmed by serology or virus isolation in 1,365 (99%). Nine cases of congenital varicella syndrome occurred. The calculated risk of congenital varicella syndrome was 0.4% (2/472) for babies whose mothers developed chicken pox between 0-12 weeks gestation and 2% (7/351) for maternal infections at 13-20 weeks.

Other adverse fetal effects were also reported in the above study. One fetal death attributable to varicella infection occurred at 23 weeks gestation, four weeks after maternal infection. This fetus did not have congenital anomalies but had multi-organ hemorrhage and had virus isolated from placenta and amniotic fluid. Follow-up of infants

revealed herpes zoster in infancy in 4/477 cases (0.8%) where maternal varicella occurred between 13 and 24 weeks and in 6/335 (1.7%) with maternal infections at 25 to 36 weeks. Follow up of 366 cases of maternal herpes zoster in pregnancy showed no attributable effect on pregnancy or in the newborns. The rate of first trimester miscarriage does not seem to be increased in women with first trimester chicken pox.[5,8]

The other suggested risk to the fetus is prematurity. A retrospective study of 31 cases by Katz, et al,[1] noted that 7 of the 31 women labored prematurely within one week of appearance of varicella vesicles. Four of these seven delivered prematurely. All seven women had varicella late in the third trimester. There were no studies done to determine the pathogenesis of the prematurity.

The low incidence of severe consequences in affected pregnancies prompts consideration of potential tests to identify the few affected fetuses. Viral cultures of amniotic fluid or chorionic villi have not been studied enough to evaluate their utility. The prognostic value of fetal IgM obtained by cordocentesis is likewise not known. Serial ultrasounds at two to four week intervals are reasonable for surveillance. The appearance of sonographically detectable abnormalities may be delayed several weeks, but severely affected fetuses are likely to show abnormalities such as polyhydramnios, hydrops, liver hyperechogenicities, hydrocephalus, or limb deformities.[11]

We have thus far concentrated on adverse effects of varicella on the fetus, but the disease in the mother can also be extremely serious. The literature emphasizes varicella pneumonia as the most worrisome entity in adults. The current feeling is that pregnancy does not predispose a woman to developing pneumonia, but that when varicella pneumonia develops in pregnant women, the morbidity and mortality are comparatively high. Supportive oxygen and ventilator therapy are used as indicated, but there are also specific antiviral medications. The effective drugs are all inhibitors of herpes DNA polymerase. Currently available in the U.S. are acyclovir, famcyclovir, and valacyclovir. None of these drugs is FDA-approved for use in pregnancy, but there are a number of journal articles regarding acyclovir's safety and efficacy in this setting.[9,10,11,12,13] In addition, a pregnancy exposure registry is maintained by the manufacturer of acyclovir and valacyclovir (Glaxo Wellcome; phone 1800-722-9292 ext. 39437). An updated report is available every six months. As of December 31, 1995, this registry contained 909 completed, prospective case reports of exposure to acyclovir to pregnant women with herpes virus infections. The total of 21 birth defects does not indicate increased numbers or unusual types of abnormalities. The registry is ongoing because more cases need to be followed to draw final conclusions. Physicians are encouraged to report cases using a simple, confidential form.[6]

There is general agreement that intravenous acyclovir should be given to pregnant women with respiratory symptoms associated with chicken pox. This is because maternal mortality from varicella pneumonia was approximately 40%[8] before the availability of acyclovir and seems to be lowered to about 14%[12] with intravenous acyclovir therapy. Acyclovir doses of 10 to 15 mgs per kilogram I.V. q. 8h for seven days have been used successfully.[1,2,4,13,14,15] A serious side effect reported in 5% of adults receiving acyclovir intravenously is renal toxicity due to precipitation of the drug in the nephron. To minimize this risk, the drug should be administered over one hour, urine output should be maintained at greater than 500 ml. per 24 hours, and BUN and creatinine should be monitored. This nephrotoxicity is completely reversible with discontinuation of the medication. Another potential adverse effect of acyclovir is phlebitis due to the medication's alkalinity. This risk can be minimized by increasing the I.V. fluid rate during acyclovir administration.

There is insufficient data available on the risk/benefit ratio of giving acyclovir to pregnant varicella patients who do not have pulmonary symptoms. Until a national consensus or definitive study is published, clinicians are advised to consult a perinatology or infectious disease subspecialist about antiviral therapy of chicken pox during pregnancy.

CHICKEN POX IN THE IMMEDIATE PERI-PARTUM PERIOD

When maternal chicken pox breaks out close to the time of delivery, the mother may infect the baby before there has been adequate time for her to produce and transfer protective antibodies across the placenta.[3] These affected newborns suffer very high mortality and serious morbidity rates. The current recommendation is that newborn babies receive VZIG if their mothers contract chicken pox between five days before and two days after delivery. However, VZIG does not always prevent neonatal chicken pox in this instance. Therefore, acyclovir might be useful instead of, or in addition to, VZIG)[18,24]. Consultation with a pediatric subspecialist is warranted when an at-risk situation arises.

CONCLUSION

It is hoped that this update will provide a concise and practical reference for clinicians dealing with dilemmas posed by varicella zoster viral infection during pregnancy.

REFERENCES

1. Braussard RC, Payne K, Gearge RB. Treatment with acyclavir of varicella pneumonia in pregnancy. *Chest* 99: 1045-47, 1991.
2. Brawn AB, Baker DA. Acyclavir therapy during pregnancy. *Obstet. Gynecalagy* 73: 526-531, 1989.
3. Brunell PA. Placental transfer af varicella-zoster antibady. *Pediatrics* 38: 1034-1038, 1966.
4. Eder SE, Apuzzia JJ, Weiss G. Varicella pneumonia during pregnancy. *Am J Perinatal* 5: 16-18, 1988.
5. Enders G, Miller E, Cradack-Watsan J, Bolley I, Ridehalgh M. Cansequences af varicella and herpes zoster in pregnancy: Prospective study af 1739 cases. *Lancet* 343: 1548-1551, 1994.
6. Glaxo Wellcame. Acyclavir pregnancy registry and valacyclavir pregnancy registry interim repart 1 June 1984-31 Dec 1995. Glaxa Wellcame Inc. P. O. Bax 13398, Research Triangle Park, NC 27709-9976.
7. Halmes SJ, Reefs, Hadler SC, Williams WW, Whartan M. Preventian af varicella *MMWR* 45: No. RR-11, 12 July 1996.
8. Harris RE, Rhaades ER. Varicella pneumania complicating pregnancy. *Obstet Gynecal* 25: 734-740, 1965.
9. Janes KL, Jahnsan KA, Chambers CD. Offspring of women infected with varicella during pregnancy: a praspective study. *Teratology* 49: 29-32, 1994.
10. Katz VL, Kuller JA, McMahon MJ, Warren MA, Wells SR. Varicella during pregnancy, maternal and fetal effects. *WJM* 163:446-450, 1995.
11. Miller E, Cradack-Watson JE, Ridehalgh MKS. Outcame in newborn babies given anti-varicella-zoster immunaglavulin after perinatal maternal infection with varicella-zaster virus. *Lancet* August 12, 1989: 371-376.
12. Pretarius D, Hayward I, Jones KL, Stamm E. Sanagraphic evaluatian af pregnancies with maternal varicella infectian. J. Ultrasound Med II: 459-463, 1992. Smega RA, Asperilla MO. Use af acyclavir far varicella pneumania during pregnancy. *Obstet Gynecol* 78: 1112-1116, 1991.
14. Spangler JG, Kirk JK, Knudsan MP. *J Fam Pract* 38: 186-191, 1994.
15. Zambrano M, Martinez J, Vasquez F, Palencia R. Varicella pneumania camplicating pregnancy. *Acta Obstet Gynecal Scand* 74: 318-320, 1995.

WISCONSIN MEDICAL JOURNAL

What's New In... Pediatric Immunizations

Jennifer R. Rucka, MD and Robert M. Kliegman, MD, Milwaukee

Pediatrics has always been known as a discipline that aims to prevent disease. Exciting possibilities for disease prevention and diagnosis in pediatric primary care are emerging rapidly. In particular, new immunizations and changes in immunization schedules have positively impacted on the health of children and the practice of pediatrics.

VARICELLA VACCINE

First developed in Japan in the 1970s, the varicella vaccine was approved by the FDA in March of 1995. The [AAP] now recommends that live attenuated varicella vaccine be used universally in childhood and for susceptible older children and adolescents.

Varicella, or chicken pox, is generally a disease of children less than 10 years of age, but 5-10% of adults remain susceptible. It has an annual incidence of 3.5 - 4 million cases and is considered one of the most contagious diseases with 80%-90% of exposed susceptible contacts within households developing varicella. Although chicken pox is generally a mild disease, it can be complicated by bacterial superinfection of skin lesions, pneumonia, encephalitis, Reyes syndrome, and the congenital varicella syndrome. Varicella in immunosuppressed patients may become disseminated and lethal.

Seroconversion in children after one dose of varicella vaccine has been around 95% with the best immune responses occurring in healthy children. Seroconversion in adolescents and adults is approximately 80% after one dose and 94% after two. The reason for the age-related decrease in immune response is unclear, nevertheless, susceptible adults and adolescents should receive two doses of the vaccine. As with other virus vaccines, the immune response is lower than that seen with the natural disease.

The vaccine is well tolerated with few side effects. A minor rash, sometimes accompanied by fever, is most commonly reported and is estimated to occur in about 5% of those vaccinated. Very mild cases of breakthrough natural varicella have been reported, usually in within the first several years after immunization, and as such, may not indicate decreasing immunity. In U.S. studies, the incidence of zoster is not increased in healthy vaccinated children.

The varicella vaccine can be successfully combined with the measles, mumps and rubella vaccine, with good immune response to all four live attenuated viruses. Although it is currently available as a single vaccine, anticipation is that it will be combined with other vaccines in a two-dose regimen.

ACELLULAR PERTUSSIS VACCINE

One- third of cases of pertussis, or whooping cough, in the U.S. occur in children less than 6-months of age, with mortality greatest in infants under 1-year of age. In 1993, 23 people died of pertussis, 20 of whom were under a year of age, and half of whom had an adult with a cough illness identified as a source of infection. Most of the children who died from the disease were too young to have received any DTP vaccine. The best way to prevent illness in infants and young children, therefore, appears to be immunization of older individuals. However, past concerns about the adverse effects of the pertussis vaccine have decreased immunization rates.

The acellular pertussis vaccine has recently been approved by the FDA for use in infants at ages 2-, 4- and 6-months. Its development oc-

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curred primarily because of concerns about patient safety. The whole-cell vaccine, used in the U.S. since the 1940s, has been associated with encephalopathy, hypotensive/hyporesponsive episodes, persistent crying, and fever. These problems are less common with the acellular vaccine. The risk of febrile seizure is about equal between the two vaccines, but the incidence of anaphylactic shock and acute encephalopathy has been difficult to determine because of the lack of experience with the acellular vaccine and the very low incidence of these problems.

The acellular vaccine appears to be more efficacious than the whole-cell vaccine. However, there is still uncertainty as to how to determine whether a child is protected, as a serologic correlate of immunity has not yet been identified.

The acellular pertussis vaccine will be combined with diphtheria and tetanus toxoids, but is not yet available in combination with the H. influenza B vaccine as the whole-cell vaccine currently is. This will mean more injections, and may necessitate additional pediatrician visits if physicians are hesitant to administer more than three injections at one time. In addition, the average price of the DTaP vaccines currently available for the fourth and fifth doses are about $5 dollars more than for the whole-cell vaccine, although this is expected to change as the acellular vaccine becomes more frequently used. The DTaP vaccine, at its current price, will add $1.5 million for every 100,000 children immunized.

Still to be decided is whether the acellular and whole cell vaccines can be used interchangeably, whether the acellular vaccine may be used to complete the series in a child who had a reaction to the whole-cell vaccine, and whether boosters should be given routinely throughout adulthood.

POLIO VACCINE

The CDC Advisory Committee on Immunization Practices recently recommended that routine polio vaccination be modified to consist of two doses of inactivated polio vaccine (IPV) followed by two doses of oral polio (live attenuated virus) vaccine (OPV) replacing the prior schedule which consisted entirely of the oral vaccine. While the all-OPV or all-IPV schedule is still acceptable, the combination schedule is preferred. The debate surrounding this change centers about two issues: herd immunity and vaccine-associated paralytic polio.

Herd immunity, the immunity in a population that is required to stop transmission from occurring, is thought to be better provided by oral polio vaccine than inactivated vaccine because OPV stimulates greater intestinal immunity and is associated with greater spread to surrounding susceptible individuals. It may, therefore, produce herd immunity even if vaccination programs are inadequate. Vaccination by contact is important in maintaining community-wide immunity to polio.

The all-OPV schedule is also less expensive, easy to administer and has a history of widespread use and successful disease eradication. No indigenous cases of polio have occurred in the U.S. since 1979 and no cases have been reported in the Western Hemisphere since 1991. However, there have been 8-10 cases reported yearly of vaccine-associated paralytic polio (VAPP), a number achieving heightened importance now that wild polio virus has been eradicated from the Western Hemisphere. VAPP is caused by virus excreted in the stool of vaccine recipients. IPV has been shown to reduce stool shedding of the virus if given prior to OPV and if sequentially used, is estimated to reduce the risk of VAPP by at least 50%.

Since VAPP occurs with the initial dose in 85% of cases, the new recommended schedule starts with IPV doses given at 2- and 4-months, followed by OPV at 12-18 months and again at 4-6 years. This schedule ideally will combine the advantages of both vaccines: keeping the intestinal immunity of OPV while reducing the risk of VAPP. This, however, will add another injection to the 2- and 4-month visit, a growing concern with the addition of the new acellular pertussis vaccine. If both new schedules are used, the number of injections at the 2- and 4-month visit increases by two, unless combination products are available. The increased number of injections may mean less compliance, and as a result, may expose children to a greater number of diseases usually prevented by immunization.

ROTAVIRUS VACCINE

The rotavirus vaccine is currently undergoing trials in the U.S., and if effective may help to reduce the incidence of the worldwide leading cause of severe gastroenteritis.

Rotavirus is responsible for 100,000 hospitalizations and 100 deaths annually in the U.S. It occurs primarily in children under two years of age, with the peak dehydrating illness occurring in infants when levels of transplacentally-acquired maternal antibodies are decreasing.

Multiple serotypes of the virus exist and all can cause severe illnesses. Several serotypes may cocirculate during a given year with the predominant strain in the community changing every one to three years. The incidence of severe rotavirus decreases after the age of two years, however, whether this represents an immune response to a single or multiple, less severe infections remains unclear. Natural immunity to the disease, mediated primarily through local intestinal processes, may result from sequential infections with distinct serotypes.

The goal of the vaccine, therefore, is to have a vaccine available to infants 2- to 6-months of age which stimulates intestinal immunity and induces active immunization against the most common serotypes of rotavirus. Two vaccines are currently in trials in multiple centers in the U.S. including Children's Hospital of Wisconsin. Both vaccines have about 50% protection against Rotavirus disease and a 80% protection against severe diarrhea.

Ideally, this vaccine, and multiple doses if they would be required, could be given along with the oral polio vaccine and in conjunction with breast-feeding. However, in several small studies, both breast-feeding and the oral polio vaccine interfered with the immune response to the rotavirus vaccine. The difference in the serum immune response was not statistically significant and could be overcome with the administration of several doses of the rotavirus vaccine.

REFERENCES:

1. CDC. Immunizotion of Adolescents. *JAMA* 1997;227:202-207.
2. Americon Acodemy of Pediatrics, Committee on Infectious Diseases. Recommended childhood immunizotion schedule. *Pediatrics* 1997;99:136
3. CDC. Recommended childhood immunizotion schedule-United Stotes, 1997. *MMWR* 1997;46:3540.

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MetaStar Matters

Gender Found to Play Little Role in Differential AMI Treatment Rates

By *Jay A. Gold, MD, JD, MPH, Nathan F. Williams, MS, and Carol J. Ferguson, MS, MPH*

It has been suggested that women are significantly undertreated for acute myocardial infarction (AMI) as compared to men. A recent MetaStar study indicates that, at least with respect to the issue of transfer, differences in the management of male and female MI patients may be explained by age rather than by gender bias. Similarly, differences in the rate of percutaneous angioplasty (PTCA) in men and women are accounted for by age. Analysis of rates of coronary artery bypass grafting (CABG) also finds age to be the predominant factor in explaining male/female differences, although in this case gender does seem to constitute a significant, if much smaller, factor.

Study Design

One of the key aspects of aggressiveness of AMI care is the use of invasive procedures such as PTCA and CABG. Because most hospitals do not perform such procedures, in many cases a patient in order to obtain them must be transferred to a hospital that does perform them. Hence, transfer of patients with myocardial infarction, along with the actual performance of invasive procedures, should be considered an important process of care that may affect patient outcome.

We examined the rates of interhospital transfer, of performance of PTCA, and of performance of CABG in male and female AMI patients in Wisconsin. Our null hypothesis was that any difference in these rates for men and women could be explained adequately by factors other than gender.

Description of Data

As data source we used UB-92 Medicare claims files. Our sample consisted of all Medicare beneficiaries who in 1996 had inpatient stays with principal diagnosis of AMI; where a beneficiary had more than one such admission, we considered only the first. There were 6412 unique beneficiaries in the sample. Female patients tended to be older than male patients (median ages of 78 and 74, respectively).

Of these patients, 978 (15.3%) were transferred to another acute care hospital (i.e., were admitted to a different hospital the same day as discharge). (Table 1)

Table 1 - Transfer rates by age and gender.

Age Group	Transfer Rate Total		Transfer Rate Males		Transfer Rate Females	
30 - 65	19.8%	(111/562)	20.7%	(79/382)	17.8%	(32/180)
66 - 68	25.4%	(165/651)	25.9%	(103/414)	26.2%	(62/237)
69 - 71	23.1%	(173/750)	22.3%	(107/479)	24.4%	(66/271)
72 - 74	18.9%	(161/853)	19.7%	(97/493)	17.8%	(64/360)
75 - 76	15.1%	(84/556)	16.3%	(46/282)	13.9%	(38/274)
77 - 78	17.0%	(91/534)	18.9%	(49/260)	15.3%	(42/274)
79 - 81	12.2%	(91/744)	12.0%	(45/374)	12.4%	(46/370)
82 - 84	9.3%	(63/677)	11.3%	(33/292)	7.8%	(30/385)
85 - 87	5.5%	(27/493)	5.0%	(9/182)	5.8%	(18/311)
88 - 103	2.0%	(12/592)	3.5%	(7/200)	1.3%	(5/392)
All Ages	15.3%	(978/6412)	17.1%	(575/3358)	13.2%	(403/3054)

The authors are Senior Vice President and Principal Clinical Coordinator (Dr. Gold), Biostatistician (Mr. Williams), and Manager of Projects (Ms. Ferguson) at MetaStar.

(Transfers from an emergency department to a hospital were not considered.) The transfer rate for male patients was 17.1%, while that for female patients was 13.2% ($p<.001$). Younger patients were significantly more likely to be transferred than older ones ($r=-.16$, $p<.001$). The vast majority of transfers were from a hospital that did not perform CABG and PTCA to one that did; in fact, 33% of the patients underwent PTCA and 35% underwent CABG in the hospitals to which they were transferred.

20.8% of all patients underwent PTCA (Table 2). The PTCA rate for men was 22.3%, and that for women was 19.2% ($p<.01$). Younger patients were significantly more likely to receive PTCA than older ones ($r=-.21$, $p<.001$).

16.6% (Table 3) of patients underwent CABG. The CABG rate for men was 19.3%, and that for women was 13.8% ($p<.001$). Younger patients were significantly more likely to reveive CABG than older ones ($r=-.20$, $p<.001$).

Table 2 - PTCA rates by age and gender.

Age Group	PTCA Rate Total		PTCA Rate Males		PTCA Rate Females	
30 - 65	28.8%	(162/562)	29.1%	(111/382)	28.3%	(51/180)
66 - 68	30.3%	(197/651)	28.7%	(119/414)	32.9%	(78/237)
69 - 71	31.2%	(234/750)	30.7%	(147/479)	32.1%	(87/271)
72 - 74	27.8%	(237/853)	28.8%	(142/493)	26.4%	(95/360)
75 - 76	23.7%	(132/556)	23.8%	(67/282)	23.7%	(65/274)
77 - 78	22.9%	(122/534)	18.9%	(49/260)	26.6%	(73/274)
79 - 81	17.7%	(132/744)	17.1%	(64/374)	18.4%	(68/370)
82 - 84	10.6%	(72/677)	11.3%	(33/292)	10.1%	(39/385)
85 - 87	5.7%	(28/493)	3.9%	(7/182)	6.8%	(21/311)
88 - 103	3.2%	(19/592)	5.5%	(11/200)	2.0%	(8/392)
All Ages	20.8%	(1335/6412)	22.3%	(750/3358)	19.2%	(585/3054)

Table 3 - CABG rates by age and gender.

Age Group	CABG Rate Total		CABG Rate Males		CABG Rate Females	
30 - 65	23.0%	(129/562)	23.6%	(90/382)	21.7%	(39/180)
66 - 68	27.2%	(177/651)	28.7%	(119/414)	24.5%	(58/237)
69 - 71	24.9%	(187/750)	26.9%	(129/479)	21.4%	(58/271)
72 - 74	24.0%	(205/853)	23.5%	(116/493)	24.7%	(89/360)
75 - 76	18.2%	(101/556)	19.5%	(55/282)	16.8%	(46/274)
77 - 78	15.7%	(84/534)	16.5%	(43/260)	15.0%	(41/274)
79 - 81	12.5%	(93/744)	14.7%	(55/374)	10.3%	(38/370)
82 - 84	9.0%	(61/677)	8.9%	(26/292)	9.1%	(35/385)
85 - 87	4.3%	(21/493)	5.5%	(10/182)	3.5%	(11/311)
88 - 103	1.5%	(9/592)	2.0%	(4/200)	1.3%	(5/392)
All Ages	16.6%	(1067/6412)	19.3%	(647/3358)	13.8%	(420/3054)

Data Analysis

Because of the strong statistical association of age with rates of transfer, PTCA, and CABG, and the disproportionate number of older females, an in-depth analysis was performed to separate the effects of age from those of gender. Three logistic regressions were performed for each measure: the first predicted transfer, PTCA, or CABG from both age and gender, the second predicted the measure from age alone, and the third predicted the measure from gender alone.

Transfer:The first logistic regression showed that age and gender together accounted for a significant proportion of the variation in transfers ($r^2=.03$, $p<.001$). The log-likelihoods from the second and third logistic regressions were compared to that of the first in order to assess the impact of each of the two predictors. Using this method, age, by itself, was highly associated with transfers ($x^2(1)=73.8$, $p<.001$). Gender did not add significantly to the predictive utility of age ($x^2(1)=1.61$, $p>.05$).

PTCA: The first logistic regression showed that age and gender together accounted for a significant proportion of the variation in PTCA ($r^2=.04$, $p<.001$). The log-likelihood ratio comparisons revealed that age accounted for virtually all of this significant variation ($x^2(1)=275.8$, $p<.001$), while gender added no significant information to the model ($x^2(1)=.14$, $p>.05$).

CABG: The first logistic regression showed that age and gender together accounted for a significant proportion of the variation in CABG ($r^2=.04$, $p<.001$). The comparable log-likelihood ratio comparisons

showed age to account for the vast bulk of this explained variation ($x^2(1)=213.54$, $p<.001$). Gender was found to account for a much smaller, but significant, part of the explained variation in the complete model ($x^2(1)=8.16$, $p<.01$).

Interpretaion

The analysis results do not support the hypothesis that transfer of AMI patients or performance of PTCA is influenced by gender. Rather, it finds a very strong age-related association, namely that younger patients are much more likely to be transferred than older patients (Tables 1 and 2). The data for performance of CABG do indicate some gender-associated influence, but this is dwarfed by the age factor. To the extent that the rates under consideration indicate the agressiveness of treatment, these data support the conclusion that little of the difference in care between female and male AMI patients can be attributed to gender rather than age considerations.

Transfer, PTCA, and CABG, of course, are only a part of AMI care. Another measure would be the use of noninvasive therapeutic measures, for example, reperfusion via thrombolytics or primary angioplasty. We encourage further analyses along this line that might employ, for example, HCFA's Cooperative Cardiovascular Project data base.

The authors wish to acknowledge David H. Mark, MD, MPH.

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CD-ROM Review

Patient Education Handouts

Zorba Paster, MD, Oregon

The last time I wrote a CD-ROM review was more than a year ago. A lot has transpired since then:

- Prices of hardware are dropping like HMO payments. A gig of hard drive was priced at about $500; now it's down to $150.

- A decent portable computer with CD-ROM can be had for under a thousand bucks.

- And the World Wide Web has become much more accessible (If you haven't seen our SMS site, visit it at: **http://www.wismed.com.**

Although computer prices are dropping, software, ergo information, seems to have plateaued. Today's offering, a program for patient handouts, rings in at $195.00. May sound pricey, but how much was that last CME course you took?

In January 1996, I reviewed the title from Clinical Reference Software for Handouts (800-237-8401). This four-titled compendium – designed for adults, children, OB/GYN issues, and drug information, is still, I think, a great offering -- its completeness is unparalleled with a cost to match.

The AAFP Patient Education Handouts from the American Academy of Family Physicians produce a better-designed, more thorough patient pamphlet. The topics covered are the common ones seen by most primary care practitioners.

So back to real question, "Why should I put out the money for a handout program?"

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Style: The handouts have *very* good drawings. They *look* professional!

Good Info: It's gone through the editorial process of a major journal (unlike this review which is a *Matter of Opinion*)

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Rating:	(out of 5)
Audience:	Adults, children, OB/GYN issues and drug information.

Zorba Paster, MD, is a practicing family physician with the Dean Medical Center in Oregon. In addition, he is a medical commentator on WISC-TV3 and has a nationwide public radio show, *Zorba Paster On Your Health,* carried on 90 stations including Wisconsin Public Radio.

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Handouts are shown in a variety of formats making it an intuitive think. You can find them by on screen or hard copy in:

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- Order of Disease State (for instance GI disease, CV diseases, etc)
- Prevention- Exercise programs, weight loss, etc.

Some examples include:

Child Safety, shows how to make a crib safe for a baby, what to look for in your house when you're child proofing. What to do with house plants. It's four-pages long with nifty drawings.

Tension Headaches, talks about how they're diagnosed and what to do about them. Another handout on migraines tells patients how to deal with the pain.

Metered Inhalers: How to use them *correctly* and what pitfalls to avoid.

Acne in Teens: What works, what doesn't and how to use your medication correctly.

So what do you need to run this CD (besides writing the check)?
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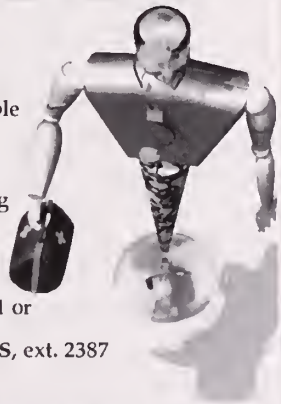

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Physician Deselection: What It Means For You

Richard A. Crespo, MA
SMS legal intern

Deselection is the process where a Managed Care Organization (MCO) terminates a contract with a physician upon written notice.[1] In some cases, deselection occurs when the MCO informs the physician that it will not renew the contract. In other cases, an MCO may deselect at any time during the contract period.

The right to terminate a contract (thereby deselecting a physician) depends on the terms of the contract. There are two sides to the issue of deselection.

From the MCO's perspective, the rapid change in the health care market may drive MCOs to deselect certain physicians from its network in order to remain financially viable. This may occur, for example, when there are too many physicians of the same specialty participating in a network.

To the physician, though, deselection may markedly decrease a physician's patient base if many of his/her patients belong to the plan that de-selected him/her. More importantly, deselection may disrupt the continuity of care that a physician is currently providing to his/her patients, if the plan prohibits its enrollees from seeking treatment from deselected physicians.[2] It should be noted that the practice of deselection usually is not illegal, even though it may produce disruptive results. Despite these implications, MCOs will continue to practice deselection as the health care market continues to shift.

This article discusses grounds for deselection; strategies for responding to deselection; state and federal initiatives and laws; and precautionary measures to minimize the impact of deselection.

Grounds for Deselection

Deselection operates through principles embodied in the contract's termination "with cause" or "without cause" provisions. The following sections explain what usually happens when an MCO terminates with or without cause.

Without Cause

A termination "without cause" provision usually allows either party to terminate the contract upon written notice. Moreover, the party terminating the contract need not provide the other party with an explanation. Thus, either party may "break clean" from the contractual obligations upon written notice. But, not all contracts allow parties to terminate "without cause" whenever they choose. Exactly when a party has a right to terminate a contract "without cause" varies.

Some contracts, commonly referred to as "evergreen contracts," renew automatically, but allow a party to terminate "without cause" at or near the **expiration of the then current term**. Below is an example of an "evergreen" contract.

The initial one-year term of this Agreement shall commence on the 1st day of June, 1997, and shall be ***renewed automatically*** *for successive one year terms unless either party gives written notice to the other party of its intention to terminate this Agreement no later than 60 days* ***prior to the expiration of the then current term.***

This provision allows the contract to renew automatically, except that either party can prevent renewal upon written notification. Such language is significant because (1) termination without cause is tied to the contract's

expiration date, and (2) either party must take an affirmative step to prevent the contract from renewing. In practice, an MCO's decision not to renew the contract is a form of de-selection. This type of de-selection is different than the following "without cause" provision.

This agreement may be terminated by either party without cause upon 90 days prior written notice.

Unlike the former example, this provision is not concerned with preventing the contract from automatically renewing. Instead, it enables either to party to "get out" of the contract whenever they choose, upon written notification.

With Cause

On the other hand, an MCO may "terminate with cause." A termination with or for cause provision enumerates grounds for termination. Common "with cause" grounds include:

- repeated failure to comply with quality assurance, peer review and utilization procedures;
- unprofessional conduct as determined by the appropriate state professional licensing agency; or
- failure to meet credentialing committee standards and procedures.

Termination with cause requires the MCO to provide the physician with a specific reason for terminating the contract. Knowing why an MCO has terminated a contract may provide a physician the opportunity to remedy the situation.

Adverse Effects of a "With Cause " Termination

Termination with cause *may* ultimately be reported to the National Practitioner Data Bank (NPDB). Federal regulations require a health care entity, that engages in a formal peer review process for the purpose of furthering quality of health care, to report any professional review action to the Medical Examining Board (MEB). The MEB is then required to report to the NPDB any professional review action that is:

a. taken during the course of a formal peer review of a physician's clinical privileges;
b. based on a physician's competence or professional conduct which the health care entity believed affected or could affect adversely the health or welfare of a patient or patients; and
c. adversely affects or may adversely affect the clinical privileges of the physician.[3]

What does all this mean?

First, the regulation considers a Health Maintenance Organization (HMO) to be a health care entity for the purpose of reporting, provided that the HMO also performs a professional review activity via a formal peer review committee.[4] Second, the regulation defines "adversely affects" as reducing, restricting, suspending, revoking, or denying clinical privileges or membership in a health care entity.

For example, if an HMO's peer review committee determined that your professional conduct adversely affected a patient's welfare, and thus decided not to renew your contract, and this decision restricted your membership in a health care entity, the action would be reportable. However, termination for over-utilization is not reportable to the NPDB, because it is not based upon professional conduct that adversely affects a patient's welfare. It is important to note that all three of the above conditions must be met to trigger the reporting: that is, formal peer review, professional conduct that adversely affects patient welfare and adversely affects clinical privileges.

Second, a "with cause" termination may affect credentialing. One part of credentialing is querying the NPDB. An MCO may deny privileges when an NPDB report indicates that a physician's professional conduct warranted suspension of his/her clinical privileges. In effect, the negative report maintained in the data bank *may* hamper a physician's ability to attain staff privileges.

How to Respond to Deselection

Your avenues of redress may vary depending on whether you were terminated with or without cause.

Termination Without Cause A Public Policy Argument

Under a without cause provision, an MCO need not inform the physician the reason or reasons for terminating the contract. Consequently, the physician may believe that the termination was based on reasons totally unrelated to quality of care.

Recent cases outside of Wisconsin indicate a trend of the courts to review cases where physicians believe the MCO acted in bad faith. The New Hampshire Supreme Court, in a case involving an MCO that terminated a physician from its network, held that the physician "... is entitled to review of the termination decision ... even when terminated without cause." The court explained that the decision to terminate may be contrary to public policy if the termination is injurious to the interests of the public. To the court, the physician-patient relationship represents a public interest that may be injured when an MCO terminates a physician's contract.[5]

However, the court cautioned that public policy and principles of fairness do not eliminate an MCO's right to terminate without cause. Instead, they offer a physician an opportunity for review of his termination if the physician believes that he or she was terminated in bad faith.

In the same vein, a California appellate court held that an MCO could not terminate without cause a physician's participation in its provider networks without first granting the physician the common law right of fair procedure. [6]

In practice, if your MCO terminates your contract without cause but you believe the MCO terminated your relationship in bad faith, you *may* have a right to have your case reviewed by the court and request re-enrollment in the plan. But your right to review is not automatic.

Termination Without Cause Arguing the Wisconsin Fair Dealership Law

Recently, a Wisconsin trial court dismissed a case filed by three chiropractors whose contract was terminated **without cause** by an HMO. The chiropractors asserted that the Wisconsin Fair Dealership Law (WFDL) makes it illegal to "terminate, cancel, fail to renew or substantially change the competitive circumstances of a dealership agreement without good cause."[7] The chiropractors argued that they are dealers as defined in WFDL and therefore are entitled to its protections.

The trial court disagreed with the chiropractors. The trial court ruled that the chiropractors are not dealers under WFDL since (1) the chiropractors are not distributing services but rather "... are providing their own services ..." and (2) that the chiropractor's limited entitlement to the use of the HMO's trade name, alone, is not enough to attain dealer status. The chiropractors, according to the trial court, failed to meet the statutory definition of dealers.[8] The chiropractors have appealed this decision.

Termination With Cause Look to Your Contract

The termination "with cause" provision specifies multiple causes for termination. In theory, an MCO is bound by those causes. That is, an MCO cannot terminate a contract for a cause other than the causes listed in the contract. To do so may be a breach of the contract. So, your first step is to verify the MCO's proffered cause for termination. Be sure that the cause for termination is specific, not ambiguous, and is listed in your contract. If the cause is not in your contract, then it is possible that the MCO may have terminated your contract on invalid grounds.

The contract may allow you to appeal the MCO's decision to terminate with cause. Appeal processes may include review by a peer review committee, quality assurance committee, or other internal mechanisms that provide an objective review of the MCO's termination decision. But appeals vary according to MCO and contract specifications. Some contracts may allow you to present written evidence, call witnesses, and perhaps review the documentation on which the MCO relied to terminate your contract.[9] You should exhaust these internal appeal procedures to determine whether the MCO's decision to terminate was legitimate

and in accordance with the contract.

State and Federal Legislation

Any Willing Provider Laws

In an effort to provide physicians greater protection against improper termination or de-selection, some states have passed "any willing provider" (AWP) laws.[10] Proponents of AWP laws argue that the law equalizes the negotiating power between large managed care organizations and small clinics or solo practitioners. In addition, advocates of patient rights maintain that the law increases patient access, thereby strengthening the physician-patient relationship.

Yet, opponents argue that AWP laws boost the costs of administering managed care plans, and that the laws interfere with the plan's ability to make business decisions.[11]

The extent to which these laws protect physicians varies from to state to state. Wisconsin's any willing provider statute exempts HMOs, PPOs, and limited service health organizations from its provisions,[12] but the statute does provide any registered pharmacist the right to participate in an HMO, limited service plan, or preferred provider plan that provides coverage of pharmaceutical services.[13] Thus, the law in Wisconsin protects pharmacists, not physicians.

The SMS supports the AMA's policy on AWP laws, which:

- acknowledges that health care plans or networks may develop criteria to determine the number of specialties needed per geographic area
- will advocate that MCOs be required to disclose to physicians the criteria used to select, retain, or exclude a physician from an MCO
- will advocate that MCOs report to the public criteria that may impact the quality, access, cost, and choice of health care services
- will advocate that physicians receive due process before action of any kind is taken
- will oppose any federal effort to preempt state AWP laws

Deselection Checklist. Physicians may want to employ the following strategies both to advocate for their patients and to seek re-enrollment in the plan. Ultimately, the likelihood of successful re-enrollment resides with the MCO unless there is a court decision in your favor.

"With Cause"	"Without Cause"
Review your contract's termination clauses	Did MCO give proper notice
Verify the cause given by MCO	Was MCO's action in bad-faith
Ask for a hearing	Ask MCO to write letter stating that termination was not for quality of care
Seek advice from expert who is willing to testify on your behalf	Ask patients and physicians to write letters of support to the MCO
Ask patients and physicians to write letters of support to the MCO	Ask employers in your area to write to the MCO
Ask employers in your area to write to the MCO	Provide the MCO with positive patient satisfaction data if you have any
Provide positive patient-satisfaction data to theMCO if you have any	Appeal to internal committees
Appeal to internal committees	

Patient Protection Act

The Patient Protection Act (PPA) is proposed Wisconsin legislation designed to inform patients and physicians alike of the benefits and restrictions of health benefit plans and to assure fairness is maintained in each of these plans.[14] While the PPA contains many provisions, the "Fairness for Providers" focuses on physician deselection and calls for plans to (1) establish medical quality assurance mechanisms with defined rights for physicians through a Physician Advisory Committee, (2) publish credentialing criteria, hospital privileges, economic criteria, the formal process used to review applications, and a **physician termination appeal process.** The SMS actively supports the PPA.

Laws Against Discrimination
To be sure, MCOs that terminate a physician's contract due to race, color, religion, sex, or national origin violate federal law.[14] Similarly, discrimination based on disability is proscribed.[15] If you believe that discrimination, not quality of care, is the basis of your termination, then you may have the court review your case. You should seek assistance from your legal representative.

Precautionary Measures
Critical examination of your contract **before** you sign may predict the impact of de-selection. The following is one way to minimize the impact of deselection.

During contract negotiations, a physician should assess how deselection may alter his/her patient base. Ask yourself this question: what percentage of my patient base will result from contracting with this MCO? Obviously, if the answer is high, then termination of the contract may decrease your patient base (and revenue) to a detrimental level.

To counter that possibility, you may want to negotiate striking the "without cause" provision from the contract, and instead require that the MCO provide you "with cause" and an opportunity to remedy the problem. As an alternative, you may want to negotiate other contracts with additional MCOs to increase your patient base. In the event one MCO terminates your contract, you should have a sufficient patient base from other contracts to offset any loss in revenue. In that sense, you have spread your risk and effectively minimized the impact of deselection.

Conclusion
Physicians are potentially susceptible to termination with cause or without cause. The MCO may terminate for reasons that range from business needs driven by market forces to quality of care issues. In some cases, an MCO may not provide any cause for termination. Accordingly, it is important for physicians to understand how MCOs deselect and to be informed of the mechanisms available for redress.

Listed below are additional questions you should ask yourself prior to signing a contract.

- Does the contract allow both parties to terminate without cause?
- Does the contract contain a with cause provision?
- How much notice does the MCO provide?
- What type of appeals process is available?
- Am I locked in to only this MCO; if so, should I strike the "without cause" provision?
- Is contract renewal automatic; if so, can I negotiate the terms of the contract?

References

1. Byan A. Liang, *Deselection under Harper v. Healthsource: A blow for maintaining patient-physician relationship in the era of managed care?*, 72 Notre Dame L. Rev. 799, 801 *(1997)*.
2. Termination of your contract by an MCO does not automatically sever the physician-patient relationship. Remember to follow legal and ethical rules for terminating the physician-patient relationship so as to avoid violations of patient abandonment.
3. 45 C.F.R. 60.9(a)(1)(i) (1996) (Health Care Quality Improvement Act.)
4. See Bureau of Health Professions, U.S. Dep't of Health and Human Services, Pub. No. HRSA-94-027, National Practitioner Data Bank Guidebook (1994).
5. *Harper v. Healthsource New Hampshire, Inc.* , 674 A.2d 962 (N.H. 1996).
6. *Potvin v. Metropolitan Life Ins. Co.*, B100170, (Cal. Ct. App. Apr. 30, 1997).
7. WIS. STAT. ANN. s. 135.03 (1995).
8. *Bakke Chiropractic Clinic v. Physicians Plus Ins. Co.*, Case No. 97-CV-0364, 97-CV-0422, 97-CV-0439, (case has been appealed, refer to case no. 97-1169).
9. See *Huellmantel v. Greenville Hosp. System*, 402 S.E.2d 489 (S.C. App 1991).
10. See American Medical Association, AMA Dep't of State Legislation, Legislative Overview: Any Willing Provider Laws - A State Survey, (1994).
11. Michael Pretzer. *Do any-willing-provider laws really help doctors?* Medical Economics, March 1995.
12. WIS. STAT. ANN. s. 628.36(2)(b)(2-3) (1995).
13. WIS STAT. ANN. s. 628.36(2m)(e)(1) (1995).
14. 42 U.S.C. 2000-2e (1994).
15. See Rehabilitation Act of 1976; 29 U.S.C. 794 (1994).

Technology

Do You Know Who Your Long Distance Carrier is? Are You Sure?

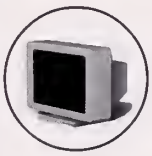
Doug Turecek
SMS chief information officer

Today consumers have more choices for selecting a long distance telephone service carrier than ever before. However, within that freedom to choose is more opportunity for individuals or fly-by-night companies to commit fraud. One of the most unscrupulous types of fraud is the practice of "slamming."

Slamming occurs when one long distance company takes a consumer's account from another long distance company without the customer's knowledge or consent. Whether you are a residential customer or a large corporate user you are at risk for being slammed. In most cases, the perpetrators are small, little-known companies that charge higher rates or additional administrative fees. These companies have the ability to buy large blocks of long-distance time from major providers like AT&T or MCI at a discounted rate and resell it to consumers for a substantial profit. Reputable service aggregators will employ this same technique, but will pass the rate savings and benefits of high volume usage on to their customers who are too small to generate the necessary volume individually. It is not illegal to aggregate accounts in order to realize larger discounts, but it is illegal to switch customers without their knowledge or consent. Typically, customers don't find out about the change until they receive a copy of their phone bill or get a call from their former long-distance provider asking them to return.

The Federal Communication Commission (FCC) requires a long distance company to obtain a customer's authorization in order to change his or her long distance service. One method of obtaining this authorization is by a Letter of Agency (LOA), provided by a long distance company, in which the customer indicates, in writing, that he or she wishes to switch long distance companies.

Common methods for enticing a consumer into providing their signature is to design the LOA such that it appears to be a contest entry blank that is actually a consent form to be switched. You might also receive a check in the mail that states in small print that by signing and cashing the check you agree to switch to a new carrier. Another method of deceiving consumers is by using the phone itself. A telemarketer might call and offer to save you money if you make a switch. Even if you say no, you could be "slammed" if the telemarketer still reports you as a switch. Often, they will begin the conversation by asking if you are the person responsible for making decisions about your long distance service, and if you answer "yes," that one word can be used as your authorization to be switched.



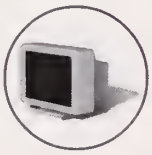
An Ounce of Prevention

The easiest way to deal with slamming is to avoid being slammed in the first place. By taking the following precautions, you could save yourself considerable inconvenience and expense:

- Call your local service provider and tell them to

flag your account so that no changes can be made without your verbal request or a signed letter originating from your address. Typically, this is referred to as a "PIC freeze." Some local carriers (i.e., Ameritech) can even place a password on your account that prevents unauthorized changes.

- Never sign anything without reading it carefully.
- If you receive a phone call about long distance service and you are not interested in switching your service, be sure to make it very clear that you are not to be switched.
- Typically, if you ask a telemarketer to send the details of the proposed plan on paper, reputable companies will follow through and fraudulent companies will not.



The Course of Treatment

If you experience telephone slamming, follow these steps as quickly as possible:

- Call your local telephone company and tell them you did not order service from the new long distance company and you would like to be reconnected to the original long distance company.
- Call the company that slammed you and let them know that you will only pay the charges your preferred carrier would have imposed. FCC regulations state that the consumer is only responsible for charges which the original carrier would have imposed. All other charges should be reversed.
- Call the long distance company you were switched from and report that you were switched without your permission. Also ask if they can flag your account so that you will not be switch without verbal verification in the future.
- If you are unable to resolve your complaint with the company that slammed you, file a strongly worded complaint with the FCC and the state Attorney General's office.

In Summary

Telecommunication fraud is nothing new and as each loop hole is closed another opens. The FCC is currently investigating new policies to limit the occurrence and profitability of slamming, but until the local and long distance companies invest the resources necessary to verify change requests, laws will have limited effect despite their intentions. Once again, the adage of buyer beware applies to dealing with long distance service providers. Invest a few minutes now and limit your chances of becoming a victim to slamming.

For more information or to file a complaint, contact:

Federal Communications Commission
Common Carrier Bureau - Enforcement Division
Informal Complaints and Public Inquiries Branch
Mail Stop Code 1600A2
2025 M St., NW
Washington, DC 20554

Wisconsin Attorney General - James Doyle
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Your Financial Fitness

Saving for Retirement

Michael J. Dolan

Michael J. Dolan, CLU, ChFC
President, SMS Insurance Services, Inc.

Americans are living longer. A 65-year-old now has an average life expectancy of about 17 additional years, but many will live another 30 years. As a result, it's more important than ever before to save during the working years in order to build income for the retirement years.

Fortunately, there are many pieces to the retirement pie. As you look ahead, start by finding out how much you will receive from Social Security. If you haven't received one of the automatic statements that the Social Security Administration distributes, call 1 (800) 772-1213 and request a Personal Benefits Estimate. It will show how much you've contributed over the years and how much you can expect at the "normal" age of 65 or if you retire earlier or later.

Then, if you are covered by a traditional defined benefit pension based on salary and years of service, ask your benefits office how much you can expect and whether the amount will increase after you've retired to keep pace with inflation. Also inquire about pay-out options. If you are married, your pension will be paid in joint-and-survivor form, providing ongoing payments to a surviving spouse, unless you both elect another option in writing.

Most of your post-retirement income, however, may come from personal savings and from tax-sheltered retirement plans to which you contribute during your working years.

If your employer offers a 401(k) plan, try to contribute as much as possible. There are several solid reasons for doing so. First, contributions are from pre-tax dollars, so they reduce your taxable income. Second, plan assets are not taxed until you begin to withdraw the money; this will probably be after retirement, when you may be in a lower tax bracket.

And you should certainly take advantage of any matching contributions made by your employer. If your employer contributes 50 cents for every dollar you put in, as many do (usually up to a specified maximum), this is equivalent to a risk-free, 50% tax-free return on your money. You can't beat that!

If you don't have a 401(k) or similar plan at work, you can contribute up to $2,000 a year ($4,000 if you are married) to an Individual Retirement Account (IRA). Contributions to an IRA are fully tax-deductible if you earn less than $25,000 a year as an individual or $40,000 a year as a couple, or if you (and your spouse) don't have another retirement plan.

Whether or not contributions are tax-deductible, however, any growth within an IRA is not taxable until you withdraw the money. Withdrawals without tax penalty may be made after you reach age 59-1/2 and must be made by the April after you reach age 70-1/2. You can open an IRA through a bank, insurance company, brokerage firm, or mutual fund family.

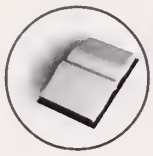
If you are self-employed, a Keogh plan provides many of the same benefits as an IRA, although contributions can be larger.

Put as much money as possible into such tax-qualified plans, then build additional personal savings toward those golden years.

Seminar Update

HCFA Announces Revised Evaluation & Management Documentation Guidelines

Dramatic changes in HCFA documentation guidelines for Evaluation & Management services will take effect January 1, 1998. These revised guidelines will be used for Medicare audits for services provided after the first of the year.



HCFA has published the revised guidelines, but does not plan to educate physicians or provide Medicare Carriers funding to do so.

The revised guidelines were developed jointly by the AMA and HCFA with input from the various national specialty societies and special consideration was given to assure they were consistent with CPT-4 clinical descriptors and definitions. The new guidelines include changes in the general multi-system examination as well as defining single system examinations for 10 organ systems.

The SMS is offering workshops around the state during October to help you decipher the new guidelines. Listed above are dates and locations for the workshops.

Member Fee: $99
NonMember Fee: $99
Lunch: N/A
Book

Registration: 8 a.m.
Program: 8:30 a.m. to 11:30 a.m.
What to bring: 1997 CPT-4

Date	Location	Site	Program Code
10/07/97	Eau Claire	Midway Motor Lodge	557
10/09/97	Milwaukee	Radisson Inn Mayfair	558
10/14/97	Wausau	Westwood - CC	559
10/16/97	Madison	Ramada Inn	560
10/21/97	Milwaukee	Radisson Inn Mayfair	561
10/23/97	Green Bay	Ramada Inn	562

To register for this workshop, please contact Elaine Stern at the SMS, (800) 362-9080, or via e-mail at: ELAINES@smswi.org.

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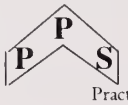

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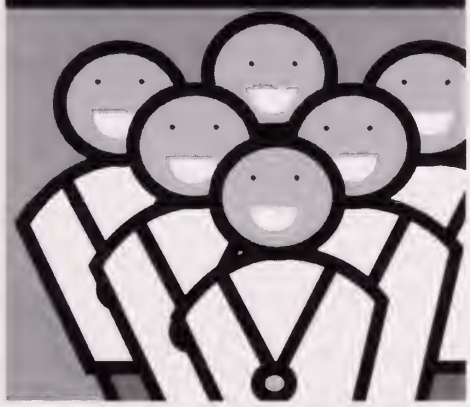

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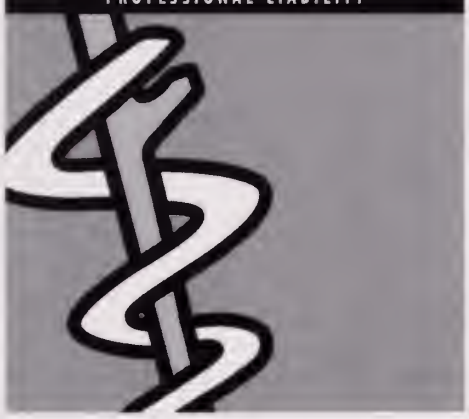

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WMJ

October 1997

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Editor's Column

Wisconsin Physicians Manage Care Every Day

Managed care is the reality of health care in America today. Every day, the media bombard us with information about the ravages of business in the giving of care and medical treatment. Increasingly, physicians are on the receiving end of the blows as more and more patients are forced to give up some decision-making power to faceless HMOs. Physicians too, are being forced to give up decision-making power. And the result is growing dissatisfaction among both patients and their physicians.

You may remember that the January, 1997 *WMJ* theme focused on managed care. We tried to present a balanced portrait of the events taking place in Wisconsin and issues surrounding HMOs.

When we planned the January issue, we felt that because of the vast and continually-changing nature of the topic a follow-up issue would be necessary, and we slated it for October.

We know that we have only scratched the surface here, but hope that we have presented issues which, even if not to your liking, will strike a chord and lead to reflection on the challenges and opportunities that managed care presents in your practice and in the health care being offered to Wisconsin patients.

SMS President, Sandra L. Osborn, MD, reflects on the history of managed care as well as recent changes, in her *President's Page* column which begins on **page 4.** The October *WMJ* also touches on the personal elements of managed care -- how it affects a physician's practice, and the less personal -- how the overall affect of managing care and costs translates into plans for treating conditions known as clinical pathways.

First, the personal; *WMJ* found an interesting article last March in the *Canadian Medical Association Journal* entitled, The Road to Wisconsin, written by a physician's wife. Lynne Sears Williams, writer and spouse of Jim Williams, MD, decided to share with Canadian physicians her husband's struggle to build a life around the Canadian health care system. Finally being unable to continue working within that system, Dr. Williams chose to leave Canada and relocate to Wisconsin. The *WMJ* was granted permission to reprint the article which appears on **page 26.**

We decided that hearing from Dr. Williams about his experiences first-hand and six-months after the move would help put the decision into context for American physicians. Associate Editor, Jeremy Pittenger spoke to Dr. Williams about his desire to work in an unencumbered environment, and the ways in which working in the U.S. provides opportunities unavailable in the Canadian medical system. He spoke about the methods he and others employed to try to change the system, and how the frustrations outweighed the advantages, forcing the decision to leave.

His view of the American system of health care, that it will begin to look a lot more like our northern neighbor's if physicians don't join together now and work to change the managed care environment, is insightful. You will find the interview with Dr. Williams, *1500 Miles South of Alberta, Canada*, beginning on **page 29.**

At the opposite end of the emotional spectrum, the Wisconsin Medical Journal looks at how managing the costs of health care can translate into benefits for both patients and physicians. Clinical pathways, care pathways, treatment protocols: all are different names for plans used in the treatment of patients with a particular condition in one defined way. We were able to gather sample pathways from four institutions around the state and hope that you will find the background information helpful. If, for instance, you have been thinking that a pathway in your department would benefit patients but weren't quite sure how to get started or put one in place, the information we provide may offer guidance for getting your program off the ground. The clinical pathways we highlight include: chest pain, knee replacement, preoperative testing and geriatric psychiatry. They are by no means all-inclusive, but were intended to provide an overview of clinical pathways and how they can be instituted. An introduction from the *WMJ* Medical Editor, Thomas Meyer, MD, begins on **page 38.**

Your Practice features an article reprinted from the California Medical Association, *Malpractice Liability and Managed Care*, which begins on **page 59**. The article, edited for Wisconsin law by the SMS Office of General Counsel, discusses increased liability risks inherent in a managed care arena and suggests strategies for reducing them.

Regardless of what we may think about managed care, it seems here to stay. But physicians today have the opportunity to shape the meaning of managing patient care every day in the future. Working together, physicians *can* make the difference for better patient care.

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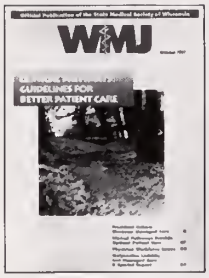

COVER THEME: CLINICAL PATHWAYS

Clinical pathways, known by many names, are becoming increasingly important as managed care dictates the ways in which physicians interact with patients. While the growing popularity of pathways may seem to stem from the "business" of medicine, physicians have been using informal treatment protocols for centuries.

This month, the WMJ looks at managed care and at several different clinical pathways which have resulted in optimal treatment for patients.

Cover design by Randy Gunter of Gunter Communications, Madison, WI.

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President's Page

Managed Care – What's New

by Sandra L. Osborn, MD, Verona

Physicians have always managed the care of their patients; in the broad sense it has been done since the first diseased person sought help and relief from another with the skills to reduce pain and improve function. We must and will continue to manage care.

Why has this become a popular concept? What is different now? What are the benefits? What are the disadvantages? Who/what is managing what/whom?

Our ability to provide medical care has made astounding progress since the 1930s and 1940s but especially in the last two to three decades. The ability to evaluate and make diagnoses, and once having documented the problem, to provide help and relief with an astounding variety of effective drugs and/or non-invasive and invasive techniques has advanced phenomenally.

Concomitant with a physician's improved capability to help patients has been a phenomenal growth in the cost of health care, a change in how it is paid for, and its lack of availability for many people. The day has passed when patients were personally responsible for all costs -- seeking care they could arrange to pay for and backed up by a "Major Medical" policy for those unexpected situations that frequently involved hospitalization.

As employers began to offer health benefits, there was a shift to the expectation that all health care would be provided by an employer or the government. This has become very expensive -- in this country about twice as much has been spent as in other developed countries, but national health indices are not any better and in some aspects are worse (e.g., obesity).

The demand for health care is likely to continue beyond the national willingness to pay for it making cost-containment and cost-effectiveness lasting challenges. The meaning of managed care now includes means to influence the access, delivery and financing of health care, and physicians are being asked to give care within the confines of principles we haven't historically been restricted to.

The origins of "Managed Care" can be traced to the 19th century when plans were established to serve particular populations. An example is railway surgery. This was an organized movement that was created to respond to the specific needs of employers in addressing the major problems of work-related accidents and trauma.

In the 1930s and 1940s the broader business community's interest was attracted and some of the precursors of the modern day HMO developed. In the 1950s, national policy-makers began to look at prepaid health plans as alternatives to traditional fee-for-service. Medicare legislation was passed in 1965, but had the result of permitting more procedures and interventions. Congress passed the Health Maintenance Organization Act in 1973, the term health maintenance organization having been coined by Ellwood in 1970. The 1980s witnessed an explosive development of managed care organizations as employers sought a means to provide benefits as health care costs soared. When national health legislation did not pass in the early 1990s, managed care remained the major agent in changing health care. Seventy-five percent of practicing physicians had at least one managed care contract in 1993, as the number of persons enrolled in managed care plans grew rapidly. Today, almost all third-party payers are managing care in some fashion.

Physicians remain the central figure in health care; even though they represent only about 20% of health care costs, physicians prescribe approximately 80% of all health care expenditures. As competition increases and profit margins shrink, selection of providers based on economics will become a prominent and unpleasant part of health care. This is the point at which physicians are feeling that they are being managed because there is an increased infringement on their autonomy rather than that care is being managed. We are at a time of a major change in the practice of medicine; the best outcome for the patient is still the goal and we now have significant tools to enable us to find a process by which that truly best outcome can be reached, by which the quality of health

care is improved. This process is part of our frustration and challenge for the immediate future.

HEDIS (Health Plan Employer Date and Information Set), a project that developed the first standardized quality reporting process for health plans was sponsored by the NCQA (National Committee for Quality Assurance) in the early 1990s. HEDIS is a set of specifications that attempts to bring uniformity to the way that plans measure the quality of care. These specifications are now divided into four main sections: quality, access and patient satisfaction, membership and utilization, and finances. Health plans' deliveries of care are now being compared based on the HEDIS set of criteria.

Physicians delivery of care is coming under increased scrutiny as pressure to document that they are providing good care mounts. Outcomes projects and measurements are in place or are being developed in various medical areas that have already resulted in uniformly better results after fewer hospital days and at less expense, not only the direct medical costs but other ancillary ones such as loss of work days, fewer drugs used and less long term disability. As information systems become better, physicians will have the opportunity to look at outcomes in a more convenient manner and help guide cost-effectiveness efforts.

Patients also must be challenged and scrutinized as changes in health care occur. A very essential aspect of reducing health care costs is not to need the care in the first place. By way of the education and preventive health care now available, patients must become our partners in health. The undertaking of a healthy life style will go far in cost-containment and cost-effectiveness. Systems to monitor patient adherence to established preventive guidelines should be developed. Patients need to better understand the source of costs in health care, and how they can also participate in managing care to improve quality and to decrease costs. The importance of the physician-patient relationship will remain paramount, but physicians can also take responsibility for the health care system from the perspective of the public and the limited resources available to society. These roles often are not seen as traditional ones for the physician and it can be uncomfortable as we make shifts in our roles, but they are crucial to maintaining quality in the health care system and to maintaining autonomy. The way physicians practice is changing, but our modern *management of care* offers many opportunities to improve the quality and cost-effectiveness of health care.

"The demand for health care is likely to continue beyond the national willingness to pay for it making cost-containment and cost-effectiveness lasting challenges."

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EVP Report

John E. Patchett, JD

The September *EVP Report* was dedicated to the professionalism of medicine. The idea that physician advocacy runs counter to professionalism was discussed. Part of professionalism is being your patients' advocate. And to advocate effectively for your patients, often you must advocate for what is best for physicians and the profession.

In our recent census, physicians clearly ranked advocacy and professionalism as critical to their professional organization, the SMS. Over the next few months, I will be introducing staff members who support your advocacy and professionalism efforts. This month, Mike Kirby, Vice President Public Affairs, updates you on advocacy efforts in the legislature and among government agencies.

SMS Public Affairs Team Works for You

by Mike Kirby, CAE

The SMS, through the Division of Public Affairs, monitors health care initiatives at the state and federal levels. Government relations staff reviews and analyzes proposed legislation and administrative rules; and formulates legislation to carry out the Society's legislative initiatives. The policy and research team is primarily responsible for performing research on health care issues facing organized medicine, and relaying its findings to SMS commissions. Commissions are responsible for formulating the policies of the SMS, and government relations uses those policies to determine its lobbying priorities and positions. (For more information, see the May 1997 *WMJ*.)

You Make the Difference

It is critical that you become more actively involved in shaping the laws and regulations that affect the medical profession and patients. Involvement can take the form of service on an SMS commission, or participation in the SMS key contact program. Each has a profound effect on the governmental process.

Service on a commission allows you an opportunity to forge policies that can help your patients access the quality care you want them to have. The SMS **Commission on Health Care Delivery and Finance**, for example, through its Managed Care subcommittee, and in conjunction with physicians from the Medical Society of Milwaukee County, has formulated a patient protection initiative to ensure that patients and providers are fully informed of the benefits and restrictions of health benefit plans and to assure fairness is maintained in each of these plans. The patient protection language is expected to begin its journey through the legislative process in the very near future, and physician activism will be key to its success.

The SMS **Key Contact** program gives physicians the opportunity to affect legislative decision-making at the grassroots level. The program pairs you with a legislator because you already know them, or you want to get to know them better. When a specific bill requires it, the SMS will ask you to contact your legislator on issues familiar to you, and will, of course, provide you with the background information you need. The Key Contact program has been critical to SMS legislative victories, including the hard-fought battle to secure reforms to the civil justice system. Even now, we continue to rely on key contacts to preserve those reforms as the trial lawyers do

their best to dismantle the $350,000 cap on non-economic damages.

The impact of personal contacts with legislators on a specific issue must never be underestimated. You, a physician, are perfectly positioned to relate medicine's issues to elected officials. You are on the front line, seeing patients daily. You, better than anyone, understand the true impact of proposed legislation and regulation, and it is this experience that legislators want to, and must hear, to make good decisions about health care.

The more physicians participate in the political process, the stronger and more powerful their voice will be in state and federal government. Knowing the importance of grassroots involvement in the political process, the SMS works hard to ensure that members are visible players in the political process. Numerous other organizations are vying for positions of strength in the Legislature. If you and other physicians do not contribute to political campaigns, trial lawyers, insurance companies and chiropractors will gladly assist the Legislature in changing how Wisconsin physicians practice medicine.

You also can become involved by participating in **WISPAC**, the Society's political action committee, and Physicians for Better Government, the SMS' conduit. These bipartisan tools are dedicated to working on behalf of physicians and their patients. It is WISPAC's and PFBG's main purpose to ensure that the voices of physicians are heard by state government. WISPAC has its own physician board of directors which oversees endorsements, political contributions, membership solicitations and political education activities. PFBG membership is similar to WISPAC membership, but PFBG membership gives you the choice of which candidates receive your financial support.

"Government relations staff reviews and analyzes proposed legislation and administrative rules; and formulates legislation to carry out the Society's legislative initiatives."

Working together, physicians can determine the path of medicine. The SMS is the professional organization in the state of Wisconsin where all physicians can band together to ensure their voices are heard, thereby enhancing the medical profession.

For more information on becoming a Key Contact, joining WISPAC or participating on an SMS Commission, please contact **Mike Kirby, VP Public Affairs**, at (800) 362-9080 ext. 260 or via e-mail at: MIKEK@smswi.org.

Family Practitioner

Western Wisconsin family physician group of ten is interested in adding a full-time, full-range BC/BE family practitioner to their thriving rural practice. A current Wisconsin license (or ability to obtain one) is required. Stress test, colposcopy and OB ultrasound skills preferred.

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Forward your CV to: HealthPartners Physician Services, Attn: Sandy Lachman, P.O. Box 1309, Minneapolis, MN 55440. Or fax to (612) 883-5395. For more information, call (612) 883-5338 or email: sandy.j.lachman@healthpartners.com. *Amery, WI is not a HPSA area and does not qualify for visa waiver status.* EO/AA Employer.

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Letters to the Editor

Physician's Responsibility Versus Patient's Rights

I'm writing to you regarding the *Point...Counterpoint* on physician responsibility to assess patient's ability to operate a motor vehicle (August, 1997). Although I do not have any quarrel with the specific example in the article, I am very uneasy when somehow physicians appoint themselves as agents of the state.

History tells us that wherever physicians have been given social powers, we have had disasters. Freedom has its own gravity and I believe our system will automatically correct the inequities in the system of patients' rights in regard to possessing a driver's license. Incidentally, physicians are also given the license to practice by the state and, left to some lawyers and many of our own patients, on a given day, 15%-20% of the physicians are not well enough to practice medicine.

There are no perfect drivers, just as there are no perfect physicians. Let us, as a profession, veer on the side of social freedom and encourage as many people to drive cars as possible. I have seen too many horror stories where nice, ordinary citizens have been harassed in their attempts to get their driver's license. In one case, a 70-year old gentleman with a replaced knee was seen limping at a DOT site. He was hauled in for multiple driving evaluations and even had to come to my clinic for a complete evaluation. There was nothing wrong with him.

I believe it is *unethical* for physicians to ever serve as agents of the state unless we are paid by the state to do so.

Vinoo Cameron, MD, Athens

Physicians Make Advisement, They Don't Withdraw Licenses

Doctor Dart's statement, "...we don't want to turn our patients in" when they are impaired (August, 1997 *Point...Counterpoint*) suggests absence of awareness of the controls over driver licensing. *Only the Wisconsin Department of Transportation Driver License Bureau has the power to issue or cancel a person's license!* A physician is one advisor in the process.

I have served as a volunteer physician advisor to the DMV/DOT for many years. When DMV is unsure from medical evidence whether to issue/not issue a driver's license they seek appropriate expert advice. Invariably, papers submitted to me in LaCrosse were papers concerning drivers in distant parts of the state so I would be unlikely to know either the driver, clinic or physician. I also drove once to Marshfield to serve on an in-person review board of drivers who had appealed their suspensions for medical reasons. Two drivers were re-instated that day.

It is apparent in some instances the patient has insisted on seeing the papers because the physician recommendation or statement is couched in defensive and oblique phrases. "Doctor code" phrases speak through quite well, however, when it's clear the message is "this person should NOT drive!" Physician reviewer recommendation is limited to: 1. recommend licensing; 2. recommend licensing with restriction (e.g., daytime driving only, only from farm to town, etc.); 3. recommend driving and/or written testing; 4. recommend no driving.

The reviewer's identity is protected since the reviewer doesn't make the final decision. Some reports are chilling: Persons with obvious uncontrolled alcoholism or insulin blackouts, some who want to *continue driving school buses!* It's scary on the road out there, doctors.

The DMV Licensing Bureau is constantly working to update and revise the codes to keep them fair and appropriate. I recommend strongly that the SMS and the Commission on Medicine & Ethics (I am a former Chair of that Commission) contact the DMV and then communicate to all state physicians:

- What the current legal reporting requirements for physicians are.
- What the current protection laws are for doctors who report to DMV a patient's impairment.
- Who to write/where to call.

Is this part of our "duty to warn" that makes it necessary for doctors to notify authorities? Absolutely, in my opinion!

John B. Weeth, MD, La Crosse

A packet of informational materials for use by physician offices is available by contacting Linda Kuhn at 608/266-2327. The packet includes an overview of the Medical/Alcohol Review Section responsibilities, persons to contact for more information, and a summary of administrative rule standards. Also included are brief explanations of license restrictions, license types, reporting of conditions and samples of various forms and brochures used by DOT.

Paul Webber, MD

Profile of a Physician Citizen of the Year Award Winner*

The Physician Citizen of the Year award honors recipients for the uncompensated civic, cultural, economic, charitable, and health care services they have provided to their local or state communities, recognizing those who have given their time and talents to improve conditions in our state.

Implemented in 1982 as a colleague-nominated award, the Physician Citizen of the Year award's annual nomination process was opened to the public in 1991. The result was an overwhelming outpouring of admiration and affection for Wisconsin's physicians. Each year since then, based on these nominations, the State Medical Society's Commission on Public Information selects up to eight award recipients from various SMS districts in the state.

". . . we can balance a family and a career and still find time to give to our community."
– Sandra L. Osborn, MD

Paul Webber, MD, of Burlington, is one of the eight 1997 SMS Physician Citizen of the Year Award recipients. He was presented the award this summer at a special ceremony at Memorial Hospital of Burlington.

Doctor Webber was nominated for his dedication to his family and his community. He has served in many different capacities including the past nine years as a St. Mary's Grade School Board member, where he currently serves as president. He also served as a finance representative to St. Mary's Parish Finance Committee. Doctor Webber has volunteered with the Boy Scouts, including one year as Weeblo leader; 4-H committee member and leader; School Board election committee; Chair of the Burlington Area School District Referendum Steering Committee; and member of the Wellness Center Committee.

In her presentation of the award to Dr. Webber, Dr. Osborn commented, "Dr. Webber has shown us that we can balance a family and a career and still find time to give to our community. We are fortunate to have those, like Dr. Webber, who give so much of themselves to better our society. He has set an example for his peers and for future generations."

"I'm very flattered to have received this award," said Webber. "I feel it is important for physicians to contribute to the community. It's as beneficial to the physicians as it is to the people they are helping. Many of my patients have expressed their congratulations to me which gives me a sense of pride."

**The 1997 SMS Physician Citizen of the Year Award was awarded to eight individuals around the state. The WMJ will profile each of these award recipients in upcoming issues.*

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Who's In The News

David E. Bertler, MD

Sandra Buelke, MD

Edmund C. Dy, MD

Dwight Dyksterhouse, MD

* Denotes SMS member

Bradley Allen, MD,* was named director of psychological services at the Village at Manor Park, Milwaukee. Doctor Allen heads Manor Park's state-certified mental health clinic.

David E. Bertler, MD,* a dermatologist, joined the medical staff at Prevea clinic in Green Bay. Doctor Bertler completed his internship in internal medicine at Walter Reed Army Medical Center in Washington, DC and his residency in dermatology at Fitzsimons Army Medical Center in Aurora, CO. He completed a fellowship program at the University of Louisville, Louisville, KY where he specialized in Moh's Chemosurgery and was also an assistant professor of medicine in dermatology. He is a member of the American Academy of Dermatology-Fellow, National Board of Medical Examiners-Diplomate, Jefferson County Medical Society, Kentucky Dermatological Association, 38th Parallel Medical Society, and Association of Military Dermatologists.

Michael Bigelow, PhD,* was voted chair-elect of the Governing Council of the AMA Medical Student Section. He is a third-year medical student at the Medical College of Wisconsin. He earned a PhD in biophysics from the Medical College's Graduate School of Biomedical Sciences in 1996, and is the first person to hold the newly-created position. Bigelow will serve a two-year term as representative of the MSS, communicating its concerns to the AMA, media and legislators. He will also coordinate the council's activities and long-range planning and help recruit medical students to active participation in the organization.

Sandra Buelke, MD,* a family physician, joined the medical staff of the New Richmond Clinic. Doctor Buelke earned her medical degree at Mayo Medical School in Rochester, MN in 1994 and completed her residency at Duluth Family Practice Residency Program. This year, Dr. Buelke received the Minnesota Academy of Family Physicians Resident of the Year Award, the top resident award in the state for family practice.

William Burns, MD,* professor of medicine at the Medical College of Wisconsin and director of the Medical College and Froedtert Hospital bone marrow transplant program, was named the Robert A. Uihlein, Jr. Professor of Hematologic Research at the Medical College.

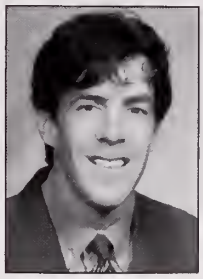
Edsel Doreza, MD,* an internist and nephrologist, was reappointed clinical assistant professor of medicine for the University of Wisconsin-Madison Medical School. Doctor Doreza earned his medical degree from the University of the East, Philippines and completed his internship and residency program in the Philippines and a second residency at Loyola University Medical Center, Chicago. Doctor Doreza is board certified in internal medicine and nephrology.

Arthur J. Dorrington, MD,* a pediatrician, was elected to the board of directors of Children's Medical Group, Inc. Doctor Dorrington practices at CMG Forestview Pediatrics in Hales Corners.

Edmund C. Dy, MD,* and **Dwight Dyksterhouse, MD,*** recently joined the medical staff of the Sheboygan Clinic. Doctor Dy, a psychiatrist, earned his medical degree from Southern Illinois University in Springfield, IL, and completed a psychiatry residency at the University of Iowa Hospitals and Clinics. He is a member of the American Psychiatric Association and the Sheboygan County Medical Society. Doctor Dyksterhouse, an obstetrician/gynecologist, earned his medical degree at the University of Michigan Medical School. He completed his internship at Blodgett Memorial Hospital in Grand Rapids, MI and his residency at Madigan Army Medical Center, Tacoma, WA. Doctor Dyksterhouse is a member of the American College of Obstetricians and Gynecologists and the American Association of Gynecologic Laparoscopists.

Gary Eddy, Sr, MD,* a gynecologic oncologist, joined the medical staff at Marshfield Clinic. He earned his medical degree from

Gary Eddy, Sr., MD



Steven Falconer, MD

Thomas Gabert, MD

Jerome Gundersen, MD

the University of Rochester School of Medicine and Dentistry in Rochester, NY, and completed his residency in obstetrics/gynecology at Los Angeles County/ University of Southern California Medical Center and a fellowship in gynecologic oncology at MD Anderson Hospital and Tumor Institute in Houston, TX.

Steven Falconer, MD,* a radiologist, joined the medical staff of the Sheboygan Medical Clinic. He earned his medical degree from the University of Minnesota Medical School in Minneapolis, and completed a diagnostic radiology residency at the University of Iowa Hospitals and Clinics. He is a member of the Sheboygan County Medical Society, the Radiological Society of North America and the Alpha Omega Alpha Medical Honor Society. He is certified by the American Board of Radiology.

Robert Fasano, MD,* an internist, joined the medical staff of Mercy Walworth Medical Center. He earned his medical degree from Loyola University, Maywood, IL and completed his residency at the University of Colorado Department of Internal Medicine. He is a member of the American College of Physicians.

Thomas Gabert, MD,* an internal medicine specialist with the Marshfield Clinic in Minocqua, was presented with the first Primary Health Care Educator Award by Governor Thompson. Doctor Gabert was nominated for the award by the doctors from the UW Medical School and the Medical School of Milwaukee for his involvement in teaching interns about primary care medicine. The award was established to recognize contributions made by primary health care educators who improve the health of Wisconsin citizens. Doctor Gabert joined the Marshfield Clinic staff in 1992 and served on the clinic's executive committee; he is director of medical education at the Lakeland Center and is a community-based clinical faculty member for the UW Medical School and the Medical College of Wisconsin in Milwaukee.

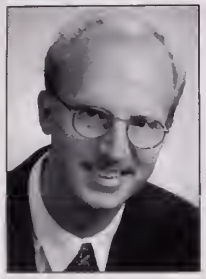
Robert Goldman, MD,* a neurologist, joined the medical staff of the General Clinic of Aurora Health Care, West Bend. Previously, he practiced at the Dean Riverview Clinic in Janesville.

David A. Grekin, MD,* a dermatologist, joined the medical staff at Marshfield Clinic. He earned his medical degree from the University of Michigan in Ann Arbor, MI, and completed his residency in dermatology at the Skin and Cancer Hospital of Philadelphia at Temple University.

Jerome Gundersen, MD,* an obstetrician/gynecologist from Gundersen Lutheran Medical Center, LaCrosse, was appointed by Governor Thompson to the University of Wisconsin Hospital and Clinics Authority Board for a three-year term. Doctor Gundersen earned his medical degree from the UW Medical School in 1962, and completed his residencies in obstetrics/gynecology at Chicago Wesley Memorial Hospital, the Northwestern University Gynecological Pathology Laboratory, and the Chicago Maternity Center. Doctor Gundersen joined the medical staff of Gundersen Clinic, Ltd., LaCrosse, in 1967 and returned in 1969 after two years of service in the U.S. Air Force. He is a member of the American College of Obstetrics and Gynecology and the American Society of Colposcopy and Cervical Pathology. He has served on the SMS Commission on Maternal and Child Health and AIDS Advisory Committee. He served on the Lutheran Hospital-La-Crosse Board of Directors and currently serves on the Gundersen Medical Foundation Board of Directors, he was also chair of Governor Thompson's AIDS Advisory Task Force from 1988-1989.

Anthony Hecht, MD,* an internist and gastroenterologist, joined the medical staff of the New Richmond Clinic. Doctor Hecht earned his medical degree from the UW Medical School and completed his residency and postgraduate training at University of Wisconsin Hospital and Clinics. He is a member of the AMA, American College of Physicians, American Society of Gastrointestinal Endoscopy, and American Gastroenterological Association.

Who's In The News


Anthony Hecht, MD

James L. Hoehn, MD

David Hoogerland, MD

Richard G. Kardell, DO

Noreen R. King, MD

James L. Hoehn, MD,* a surgical oncologist at Marshfield Clinic, was elected to a three-year term on the Board of Directors of the national Surgical Adjuvant Breast and Bowel Project. Doctor Hoehn earned his medical degree from the UW Medical School and completed his residency at Presbyterian St. Luke's Hospital, Chicago. Doctor Hoehn was a senior fellow in oncologic surgery at MD Anderson Hospital and Tumor Institute, Houston, TX.

David Hoogerland, MD,* was appointed to the board of directors of Horizon Healthcare Inc, Milwaukee.

Bradley F. Johnson, MD,* an internist at Rice Clinic Medical Center, was inducted as a fellow of the American College of Physicians. Doctor Johnson earned his medical degree from the UW Medical School in 1980.

Richard G. Kardell, DO,* an otorhinolaryngology/oro-facial plastic surgeon from Marshfield Clinic, was elected president-elect of the Wisconsin Association of Osteopathic Physicians and Surgeons at its annual convention. His responsibilities will include serving as chair of the program committee which develops CME programs. Doctor Kardell is board certified in otorhinolaryngology/oro-facial plastic surgery.

Noreen R. King, MD,* obstetrician/gynecologist, joined the medical staff at Prevea Clinic, Green Bay. She earned her medical degree from Michigan State University College of Human Medicine, East Lansing, and her residency at Hurley Medical Center, Michigan.

George Kuttickat, MD,* a cardiologist, joined the medical staff at the Sheboygan Clinic. He earned his medical degree at St John's Medical College, Bangalore University in India, and completed internal medicine and cardiology residencies at James H. Quillen College of Medicine, East Tennessee State University in Johnson City where he was chief resident for one year. He is a member of the Sheboygan County Medical Society and the American College of Cardiology.

Kathryn Lynn, DO,* an internist, joined the medical staff at Marsh-field Clinic. Doctor Lynn earned her medical degree from the University of Osteopathic Medicine and Health Sciences in Des Moines, Iowa, and completed her residency in internal medicine at the Clinic and St. Joseph's Hospital.

Deborah L. Manjoney, MD,* one of two female cardiothoracic surgeons in Wisconsin, was appointed medical director for the Karen Yontz Women's Cardia Awareness Center. She recently joined the Infinity Heart Institute practice, Milwaukee. She is a member of the American College of Surgeons, Fellow, American College of Chest Physicians, Fellow, American Heart Association, Cardiovascular Council, John H. Davis Surgical Society, AMA, New York Thoracic Society, Society of Thoracic Surgeons, Milwaukee Academy of Medicine, Wisconsin Surgical Society, and is a clinical instructor with the Medical College of Wisconsin.

Gale Mendeloff, MD,* was appointed to the board of directors of Horizon Healthcare inc., Milwaukee.

Joseph Meyer, MD,* an internist, joined the medical staff of Franciscan Skemp Healthcare, LaCrosse urgent care department. Doctor Meyer earned his medical degree from the Medical College of Wisconsin, Milwaukee, and completed his residency at Gundersen Lutheran.

Michael Meyers, MD,* a cardiologist, joined the medical staff of Franciscan Skemp Healthcare, LaCrosse Campus cardiology department. He earned his medical degree from the Medical College of Wisconsin, Milwaukee, and completed a fellowship in cardiovascular medicine and a residency in internal medicine at the Mayo Graduate School of Medicine, Rochester, MN.

Carrie Nelson, MD,* an internist and geriatrician at Red Cedar Clinic in Menomonie, was elected a fellow of the American College of Physicians. Doctor Nelson earned her medical degree from the University of Minnesota School of Medicine, Minneapolis, MN, and completed an internal medicine residency at the University of Minnesota Affiliated Hospitals, 1976-1979. She taught internal medicine residents for two years at Abbot Northwestern

George Kuttickat, MD

Deborah L. Manjoney, MD

Joseph Meyer, MD

Michael Meyers, MD

Carrie Nelson, MD

in Minneapolis and practiced in Oregon for several years before returning to Menomonie. She is a member of the American College of Physicians, American Geriatrics Society, and the Gerontology Society of America.

Darren G. Nelson, MD,* a general, thoracic and vascular surgeon, joined the medical staff of Ripon Medical Center. Doctor Nelson recently completed his residency in general surgery at Columbus Hospital in Chicago, an affiliate of Northwestern University. He is a member of the AMA, the Society for Laproendoscopic Surgeons, the Society of American Gastrointestinal Endoscopic Surgeons, and is a candidate member of the American College of Surgeons.

Christopher S. Nielsen, MD,* a surgeon, joined the medical staff of Rice Clinic Surgical Services. Doctor Nielsen earned his medical degree from the University Iowa College of Medicine, and completed his residency in general surgery at Iowa Methodist Medical Center in Des Moines, Iowa.

Gregory D. Powell, MD,* a medicine and rehabilitation specialist, joined the medical staff of Marshfield Clinic. Doctor Powell earned his medical degree from the Medical College of Wisconsin in Milwaukee, and completed his residency in rehabilitation at the University of Texas Health Science Center, Department of Rehabilitation Medicine, San Antonio, TX.

Stephanie Schulte, MD,* a family physician, joined the medical staff of Luther Hospital and Midelfort Clinic. She earned her medical degree from the University of Minnesota School of Medicine in Minneapolis, and completed her residency at St. Francis-Mayo Family Practice program in LaCrosse.

Michael Severson, MD,* an emergency medicine specialist, joined the medical staff of Sacred Heart Hospital. He earned his medical degree from the University of Minnesota School of Medicine in Minneapolis, and completed his residency in emergency medicine at Methodist Hospital, Indianapolis.

Renee Sinopoli, MD, a family physician, joined the medical staff of Columbia Primary Care Physicians, Milwaukee.

John M. Skantz, MD,* a neurologist, joined the medical staff of All Saints Medical Group, Racine. Doctor Skantz earned his medical degree from the Medical College of Wisconsin, Milwaukee, and completed his residency in neurology and a fellowship in neurophysiology at the Medical College of Wisconsin. Doctor Skantz is board certified in neurology.

Michelle R. Storms, MD,* a family physician, joined the medical staff of William E. Raduege, MD in Woodruff. Doctor Storms earned her medical degree from the Saint Louis University School of Medicine in 1983, and completed her family practice residency at St. Mary's Hospital, Milwaukee. She is board certified in family practice.

Carol J. Uebelacker, MD,* of Delafield, was elected a fellow of the American College of Physicians, for distinguishing herself among her colleagues and in her community through service to family medicine and professional development.

Michael Volk, MD,* an internist, joined the medical staff of Kettle Moraine Oncology Clinic. Doctor Volk completed an internal medicine residency and hematology fellowship at the University of Wisconsin, Madison. He also has training in medical oncology from the Medical College of Wisconsin. Doctor Volk is a member of the AMA, the American Society of Hematology and the American Society of Clinical Oncology.

David Worley, MD,* a family physician, joined the medical staff of Superior's Mariner Medical Clinic. Docter Worley earned his medical degree from the University of Wisconsin Medical School, and completed his residency training in family practice at the University of Wisconsin, Madison.

Welcome New Members

The individuals listed below were recently elected to SMS membership by their county medical societies. We are pleased to welcome them to the SMS.

Columbia-Marquette-Adams
Abid Mohiuddin, MD
Thomas Jackson, MD
Frederick Bronson, MD
Richard Christianson, MD
Kathleen Doyle, MD
David Gregory, MD
Gerald Krumpos, MD
Paul Slavik, MD

Claire-Dunn-Pepin
Richard J. Daniels, MD
Erik J. Dickson, MD
David W. Florence, MD
James A. Ottevaere, II, MD
Timothy J. Robertson, MD
Michael J. Serverson, MD
David T. Spika, MD
Karla J. Spika, MD

Green Lake-Waushara
Alonzo Gimenez, MD
Michael G. Ginder, MD

Kenosha
Anthony A. Niezyniecki, MD

LaCrosse
Kenneth E. Kolb, MD

Milwaukee
Rakshinda Almas, MD
Husam H. Balkhy, MD
Michael A. Borkowski, MD
David L. Coran, MD
James B. Gosset, MD
Cindy Ann Gubbels, MD
Charles J. Lanzarotti, MD
Panagiotis Panotopoulos, MD
Debra Lu Schell, MD
Jonathan W. Spivack, MD
Gerald E. Sullivan, MD
Peggy Tong, MD
Angus A. Wilfong, MD
Anna M. Windsor, MD
Charles B. Yang, MD
Maritoni M. Abraham, MD
Vetrivel R. Balakrishnan, MD
Steve Iksoo Chang, MD
Gerard S. Doyle, MD
Nina H. French, MD
Swee-Chin Loo, MD
Ramsey F. Markus, MD
Samir Mullick, MD
Shannon P. Allen -Gryzwa
Maureen A. Melchior
Nicholas Joseph Meyer
Maureen A. Melchior
Jason J. Wirtz

Monroe
Rick A. Erdman, MD

Walworth
Hemalini Mehta, MD
Robert Fasano, MD
Marguerite Compton, MD

Washington
Kathleen A. Shallow, MD
Michael J. Volk, MD

Winnebago
Bruce Harvey, MD

AMA Awards

The Wisconsin physicians listed below recently earned the AMA's Physician Recognition Award. They have distinguished themselves and their profession through their commitment to continuing education, and the SMS offers thems our congratulations. The * indicates members of the SMS.

Cirillo, Robert L.
Dempsey, Robert J.
Frantzides, Constantinos
Gobis, John E.
Hoffman, William K.
* Thomason, Jessica L.
* Tiu, Alfonso L.

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In Remembrance

Roland E. Herrington, MD: A Salute to a Wisconsin Pioneer

Roland E. Herrington, MD

by John LaBissoniere, SMS Peer Review Consultant

Early in the 1970s, the AMA began receiving increasing numbers of appeals from medical societies and individual physicians for guidance concerning chemically-dependent and emotionally-impaired physicians. Coincidentally, the SMS, through the leadership of Gerald Kempthorne, MD, recognized that Wisconsin physicians were by no means immune from this growing problem.

Despite a prevailing attitude in the physician population that the medical profession was not subject to the same problems of others in society, the SMS Commission on Mediation and Peer Review formed an impaired physician program in 1977. Although short on experience and expertise, but long on determination, the struggling program set about to identify and intervene with physicians in need of referral to treatment. It soon became apparent that this program was in great need of leadership with expertise in treatment of addiction. Fortunately, this need was soon to be met by Roland Herrington, MD, a true pioneer in treating the impaired practitioner. The Society was quick to recruit him to take part in developing what was then known as the Impaired Physician Program. Doctor Herrington had just established one of the first addiction treatment programs for professionals at De Paul Rehabilitation Hospital in Milwaukee. As evidence of his efforts as a pioneer, in 1982, Dr. Herrington co-authored the first article to appear in the *Journal of the American Medical Association* describing the use and effectiveness of biologic fluid testing to monitor and advocate for physicians with chemical dependency.

In his understandable impatience, Dr. Herrington made it clear that the needs of impaired physicians were real and urgent and that the program had to "get going." With the benefit of his experience, his practical knowledge of physician impairment problems, and his direct approach, the Statewide Physician Health Program (SPHP) began to expand, and to become recognized throughout the state as a dependable source of assistance. Through Dr. Herrington's inspiration and persistence, a separate program Managing Committee was formed, and a membership dues assessment was established to appoint a program medical director. Education of various physician groups was greatly expanded, and a cooperative effort with the Medical Examining Board was established and maintained.

As a founding member of the SPHP Managing Committee and of the Coordinating Council on Physician Impairment (the cooperative agreement with the Medical Examining Board) the SMS Physician Health Program flourished. Moreover, practicing physicians throughout Wisconsin, rather than denying the existence of impairment problems, increasingly referred impaired colleagues to the program for support and to looked to Dr. Herrington and his associates for counsel and guidance.

Doctor Herrington was born in Freeport, IL and obtained his medical education at Marquette University School of Medicine. After a surgical residency at Deaconess Hospital in Milwaukee, he established a surgical practice with his brother, a surgeon in West Allis. Long hours of work and years of being on call plus his own problems with drug and alcohol dependence changed Dr. Herrington's life and his medical practice forever. Unlike many other physicians, he committed himself to obtaining needed help. Through this experience, he perceived the huge need of other troubled physicians for skilled support and treatment enabling them to proceed to sustained recovery.

In 1982, the Medical Society of Milwaukee County bestowed its Distinguished Service Award on Dr. Herrington for his pioneering and continuing efforts with chemically-impaired professionals. In December, 1988, the SMS presented its Meritorious Service Award to Dr. Herrington for his exceptional leadership during his

nine-year tenure as chair of the Society's Committee on Alcohol and Other Drug Abuse. The award also recognized his outstanding service to the SMS and its physician members through the SPHP.

Doctor Herrington gave the immediate impression of one who tolerated no nonsense. He was described as gruff in his approach, but patient after patient and those with whom he worked discovered his deep compassion and empathy. It has been said that he was totally dedicated to his patients and to his efforts in their treatment. During a memorial service in Milwaukee following Dr. Herrington's death, March 1, 1997, his brother and sister, two colleagues whom he had befriended, professional associates, and a former patient all spoke of Dr. Herrington's understanding and caring and exquisite knowledge of his patients.

Following retirement, his professional group established its affiliation with Rogers Memorial Hospital in Oconomowoc. A new facility established at Rogers was named The Herrington Recovery Center in honor of this pioneer in physician impairment treatment in Wisconsin.

"[Dr. Herrington] perceived the huge need of other troubled physicians for skilled support and treatment enabling them to proceed to sustained recovery."

If Dr. Herrington were alive today, it is likely that he would acknowledge the strides made in treatment of physician impairment. However, he would insist that much is yet to be done to discover physician impairment, to intervene and to refer into quality treatment and into long-term recovery. Physicians in Wisconsin are urged to take advantage of the expertise and dedication of the Statewide Physician Health Program when encountering impairment problems in their hospitals, clinics and communities. For more information on this program, please contact John LaBissoniere, SMS Peer Review Consultant, or Sonia Porter, at (800) 362-9080. Sonia may be reached via e-mail at: SONIAP@smswi.org.

In Remembrance

Wernick, Shelley, MD, 53, a neurosurgeon, from Bayside, WI, died of leukemia June 16, 1997. Doctor Wernick earned his medical degree at the University of Illinois College of Medicine. He was chief of neurosurgery at Children's Hospital, Milwaukee and an associate clinical professor at the Medical College of Wisconsin. He had advanced certification for surgery, FACS. Doctor Wernick was a captain in the U.S. Army Reserves and was part of the neurosurgery detachment from 1971 through 1977. He was a talented musician who played piano in a jazz band in college and enjoyed the piano all his life. He is survived by his wife, Susan; four children: Aaron Wernick of Bayside; Lisa Wernick of Milwaukee; Robert Wernick of Los Angeles; and Michael Wernick of Bayside; three brothers: Marshall Wernick of Los Angeles, Allan Wernick, MD, of Chicago; and Gilbert Wernick of Chicago.

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Umbrella Coverage Available up to $10 Million	NO	YES
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Scheduled Property Covered as Valued	NO	YES
Total Loss Cash Settlement Option	NO	YES
Water Back-Up Coverage	NO	YES
Mortgage Renegotiation Coverage	NO	YES
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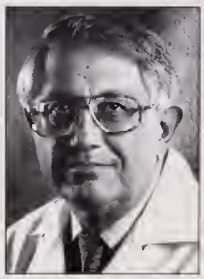


Guest Editorial

Organized Medicine and Managed Care – A Proposal for a New and Better Relationship

by William J. Maurer, MD, Marshfield

One need only to pick up a national magazine, local newspaper, or watch the evening news to quickly observe that there is considerable tension between patients, physicians and managed care insurance companies. This tension is a result of changes in medical care financing and delivery that have occurred as a result of earlier demands for cost containment. These changes are commonly referred to as managed care.

There is a national surge of second thoughts about managed health care even in California resulting in an avalanche of proposals for more government regulation of the industry.

While patients are showing improved patient satisfaction in general, there are increasing numbers of individual complaints about Health Maintenance Organizations and their policies. More than 150 million Americans are under some sort of plan that reviews or restricts health care choices.

State legislatures across the country have introduced about 1,000 managed care bills and at least 182 bills have become law.

The issues involved are complex. An increasing number of physicians understand that many cost containment efforts and efficient practice methods are actually desirable and long overdue but still feel somewhat ambivalent about the new environment not being to their liking because of issues that will be further explored in this paper. I will attempt to numerate the most common concerns of patients and physicians about managed care, determine whether these concerns are present in Wisconsin and, if so, to what extent. I will also attempt to review some of the above mentioned concerns from the perspective of an HMO Medical Director and explore whether we can come to a better understanding between organized medicine and the HMO insurance industry.

Dr. Maurer is Medical Director, Security Health Plan and former President of Marshfield Clinic.

Preserving the Physician/ Patient Relationship Under Managed Care

The HMO industry endeavors to provide medical care that ensures the best outcome for the patient while using neither too few nor too many resources and having that care received in the appropriate location by the proper provider.

To my knowledge, most of the areas of national concern regarding managed care practices are occurring to a lesser degree in our state. Through various policies and procedures, the State of Wisconsin Insurance Commissioner monitors the managed care industry very well. Many HMOs in this state voluntarily conform to national accreditation standards such as those set by the National Committee for Quality Assurance (NCQA).

Many physicians' concerns could be summarized by saying that they desire to preserve the physician/patient relationship and their ability to fulfill the role of patient advocate and that managed care interferes with this relationship. All physicians strive to obtain the best care and outcome for their patients.

Physicians now know that there are tremendous variations in practice and that practices need to be better standardized.

Some of the changes which have occurred are not because of managed care, but simply based on new knowledge and evolutionary ways of delivering medical care. New knowledge has established that lifestyle changes are equally as important as the medical care delivery system.

Physicians see their relationship with patients interfered with in a number of ways. The first would be whether or not there should be oversight of their care of a patient and whether they are subjected to a lot of unnecessary busy work or hassle. While it is

true that this occurs, any oversight of a practice should be as unobtrusive to the care process as possible.

It is essential that proper confidentiality of medical information be maintained by those in an insurance company who have access to sensitive information. Physicians feel the greater access to information that other individuals have, the more chance for lack of confidentiality.

Referral administration and limitations are a major concern to physicians who feel that as a result of the development of networks of care that their referral options may be limited beyond the quality of care available in such a network. It is the responsibility of the health plan to make sure that quality health care is available within the network and that there is free referral of patients outside of the network for procedures or a level of care that is not available in the HMO network. However, due to the fact that an HMO has made financial arrangements with physicians and set up a quality network of providers on behalf of their participants leading to cost containment, HMOs expect that their members stay within the defined network of hospitals and physicians if quality care is available.

The issue of continuity of care needs to be negotiated on a case by case basis. As an example, when someone changes insurance plans I believe most HMOs would allow immediate post-op follow-up care for a reasonable length of time following surgery and continuity of care late in pregnancy. Yet, when participants change insurance policies, they need to realize that their care must be delivered by the HMOs established network.

Limiting Access

In an effort to have care delivered in the office setting rather than in a more expensive manner, plans have attempted to encourage patients to limit emergency room use. The difficulty is that a patient may have enough anxiety or concern about a medical condition to feel that an emergency room visit is necessary but, in retrospect, find that their condition was not life threatening and could have been handled in an office visit.

At times, HMOs do not have access to the admitting complaint which is appropriate for an emergency room visit while the diagnosis upon discharge is listed as a non-emergent condition (chest pain vs. anxiety). It is apparent that nothing in managed care should prevent timely and appropriate access to emergency room facilities but there needs to be educational efforts made to achieve appropriate emergency room usage.

In spite of their willingness to help standardize practice and develop guidelines for the care of patients, physicians are concerned that these guidelines will become mandatory requirements or turn into more rigid cookbook medicine that may not apply to all cases. More and more physicians seem willing to develop and embrace guidelines as long as they are not mandatory.

In an attempt to have primary medical care delivered by appropriately-trained primary care physicians, a number of HMOs have limited access to specialists only by referral. While this may be an appropriate model of care, HMOs are now realizing that some patients with more complicated or serious medical conditions should be cared for by a specialist on a long term basis. As such, systems will evolve to have both the referral of patients to specialists and incorporate the care of this patient on a long term basis when medically necessary. Physicians also believe that some health plans have developed penalty systems for noncooperation with insurance company policies and procedures or limit the ability of physicians to explain their recommendations for care to a patient even when these recommendations may be services that are not covered by a health plan or in a location outside of the network. To my knowledge, there are no "gag rule" clauses in any Wisconsin HMO contract. Physicians and patients should always have the right to speak freely about their concerns and to discuss treatments whether or not they are covered under their insurance plan. All insurance company procedures should be fair and open to scrutiny by participating physicians.

Wisconsin law has prohibited gag clauses in insurance contracts since 1975. Additionally, all HMO contracts with providers are on file at the Office of the Commissioner of Insurance. Insurance Commissioner Josephine Musser testified before Congress in 1996 that no Wisconsin HMOs have gag clauses in their provider contracts and that her office has never received a complaint on the issue.

Patients, represented by their physicians, sometimes wish to believe that all aspects of medical care should be covered and that every service their physician suggests is payable. However, we must remember that there are varying degrees of coverage, some of which are determined by the employer furnishing the insurance or as selected by plan participants.

While there are many issues as to covered and non-covered services, there are certainly a few frequent and troublesome areas such as whether a treatment is a mainstream medical procedure, experimental or in some cases cosmetic and not always medically necessary. In addition, there are some areas such as temporomandibular joint disease treatment and

surgery in which there has been confusion as to whether this should be covered under health or a dental insurance type policy. Certainly, plan participants need to be well informed and educated about their insurance coverage benefits and limitations.

Finally, physicians are sensitive about the fact that decisions to deny coverage of care are not made by other physicians but by nurses or clerks according to developed protocols. NCQA standards require that any denial of service be reviewed by the HMOs Medical Director. In some cases, attending physicians even believe that the HMOs Medical Director may not have the background to make specific decisions that involve knowledge that only a specialist might have. In speaking to this, it should be noted that HMO Medical Directors generally have a panel of specialists that they query on issues that are beyond their level of training and expertise.

There are two likely provisions of the proposed Patient Protection Act (PPA) that raise particular concern. The first requires that only applicable specialists may review and deny claims submitted by other specialists. This would be an onerous, expensive and an unnecessary requirement as under current practice HMO Medical Directors routinely consult with specialty reviewers as appropriate.

The second likely Patient Protection Act provision of great concern requires HMO Grievance Committee decisions to be appealable to an external reviewer who does not have affiliation with the health plan. This approach would legislatively remove the ability to make final internal business decisions from private organizations and is, in my opinion, unnecessary.

Wisconsin HMOs are nationally known for having one of the best grievance processes in the nation. Under current law, every time a benefit is denied, the HMO enrollee receives notification of their right to file a grievance and the procedure to follow. Much of what is proposed in patient protection legislation is already required by the state or voluntarily done by HMOs and other health insurance companies.

Going Forward

During the fall of 1997, representatives of the SMS and the Association of Wisconsin HMOs will meet to discuss areas of mutual concern regarding the delivery of high-quality health care to the citizens of Wisconsin. Additionally, at its May meeting, the Association of Wisconsin HMOs Board of Directors heard from the Center for Public Representation regarding HMO concerns from the perspective of a consumer advocacy group.

Members of the Association of Wisconsin HMOs are currently making various attempts to resolve health plan/provider issues through a collaborative process instead of legislation. We must work to build and expand on these efforts. Examples of such efforts include: HMO Association collaboration with the Wisconsin Association for Perinatal Care through Quality Health Care Forums (QHCF) to discuss quality of care issues surrounding maternity length of stay. The next QHCF will be held this month; Milwaukee HMOs and the Medical Society of Milwaukee County have developed a standardized out of network referral form; and Madison HMOs and several out state HMOs have been working since 1996 to coordinate health promotion, disease prevention, and preventive care objectives. They have also worked to develop a common application for provider credentialing as well as a common documentation request for facility credentialing.

All of these efforts are designed to eliminate any unnecessary paperwork and hassle for both HMOs and physicians. This also has the desired affect of conserving valuable time and resources that can then be redirected toward providing even higher quality care for Wisconsin consumers.

Whatever our perspectives or differences, surely we agree that Wisconsin's health care consumers are better served by consensus approaches to ensuring quality of care then by divisive battles in the legislature. Direct dialogue with representatives of the SMS and Medical Directors of the HMO Association will yield far greater results than a one size fits all legislative or regulatory approach to quality of care issues.

We need to use a combination of clinical expertise, research based evidence and this combined with patient preferences regarding medical care and cover that care under our health insurance programs.

As the stakeholders in the health care delivery system enhance their collective communication, we may find consensus quite a bit closer than we imagined and a preferable approach.

Most importantly, I would suggest that it is in everyone's best interest that health care delivery be led by physician professionals who have dedicated their lives to the delivery of medical care and who have demonstrated that they are the best representatives for patients of the health care system. Fellow physicians, let's keep and expand our leadership role.

Guest Editorial

Dr. Hunt may be reached at:
1220 Dewey Avenue, Milwaukee,
Wisconsin 53213 (414) 454-6610
fax (414) 454-6644.

The Troubled

by Sheri A. Hunt, MD, Milwaukee

The troubled, the troubled
Managed care just won't pay.
I'd think that would solve it,
I hope that it may.

The troubled, the troubled
Just manage their care,
We need them I say
To be out of our hair.

We've capped their coverage
Our pockets aren't deep
Enough is enough!
I'm sure they will keep.

The troubled, don't bother.
They'll be more trouble still
For all our mad efforts
It won't stop until

The cobwebs that live
In their heads clear away
Or their benefits run out
Day before yesterday.

The troubled don't like us.
Our needles and pills
Make holes in their visions
Like porcupine quills.

The troubled don't need us
For food or for clothes
To clean up their bottoms
Wipe stuff from their nose.

The troubled, the troubled
Their numbers are growing
But we'll cap the dollars
To keep it from showing.

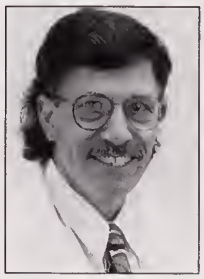
When they spill out of the cellars
And onto the streets
Their clause preexists
So it's still clean and neat.

The troubled, the troubled,
How can this be
They bear a resemblance
To managed care employees!

The troubled, the troubled
We know them, we do.
They work for these companies,
They may even be you.

The troubled,
the troubled
Will we managed their
care
When your mother or dad
Needs their own doctor there?

Is denial by fax
From case management fair?
When a doctor is needed,
Is that how we should care?



Guest Editorial

The Year 2010

by James P. Fogarty, MD, Barron

"It's been a good decade," thought Harry Schropp.

Hard work and an unwavering commitment to societal good had finally paid off. The party of the people had achieved its ultimate goal of social equality.

He chuckled as he hurried along the abandoned, eerily silent streets, glancing at his watch and feeling reassured that the Local Committee of Food Distribution (LCFD) meeting would not start without him. A feeling of power surged through him as his purposeful gait drew him closer to the entry way identified by a large, green-lettered sign, LCFD. A quick nod of acknowledgment and a flash of his committee identification card (CID) passed him by the armed guard. He half-jokingly thought to himself as he caught sight of the other six committee members, "If your life is to be run by a committee, make sure you are a member of the committee."

Ah yes. The LCFD. The peripheral level of bureaucratic control to ensure equality of food consumption. Ten years ago, this committee's existence would have been laughed at. But no more. Today, the LCFD had the power to imprison offenders, impound assets and control productivity and distribution of all food items.

Dr. Fogarty is a general surgeon associated with Midelfort Clinic, Ltd. in Barron, WI.

It all began twelve years ago as a moral issue. Food is a necessity of life and all who exist are entitled to the same amount of food as a guaranteed right, not as an earned commodity.

At first this "right" applied only to the elderly and was provided through Grocicare. Grocicare took care of a collective group of unrealistic people who had failed to plan for their retirement or the economic consequences. Then the indigent and Grocicaid. Grocicaid added a collective group of people who seemed unable to earn money for their own food.

These programs, Grocicare and Grocicaid, quickly became federal nightmares of consumption as people utilizing someone else's money played the role.

To control these cost overruns, grocery store owners were hit with a series of bizarre shifting codes of federal paper work and regulations and a curious payment system called DRG or Dietary Regulation Group. It worked like this -- a consumer entered the store, took as many groceries as he wanted and left. The grocer filled out a form which he sent to the federal government for payment. This information was based on the customer's height, weight, age, and a mystical number called the RFVI, that is, the Relative Food Value Index. The complicated formula derived seemed to always fall short of what the goods had cost the grocer.

To stay in business, the grocer needed to transfer his cost to private paying customers who either directly paid for items obtained or paid for them indirectly via employers' benefit wage packages.

Here is where the consumer began to lose control over what groceries he could purchase and when he could purchase them.

Employees began to bargain directly with the grocery store owners in order to achieve cost control in goods for consumption. These programs, called Managed Grocery Consumption (MGC) worked like this: the employer paid the grocery store owner a set fee for each of his employees and their families who could then receive all the food they needed, wanted, or both. The grocery store owner then became the risk taker and had to devise ways to control consumption.

Lots of barriers were set up to slow the progress of food consumption.

There was the "doorkeeper" who monitored which aisles you could enter; there was the prior authorization form that had to be filed before red meat could be received; there was a myriad of forms and regulations required before anything but the basic necessities could be obtained. An ingenious form of rationing by queue was achieved when store owners began to open their doors for only short periods of time,

often unannounced, resulting in long lines of frustrated consumers.

The whole system collapsed as enraged consumers looked to government for a fair solution.

The Social Grocery Society Act (SGSA) changed all of this.

All grocery production and consumption became centralized. Licenses were required to grow, sell and consume food. Anyone caught exchanging groceries outside of the system was immediately imprisoned. Home gardens were outlawed as the motto, "We sow and reap for the common good," was posted everywhere.

Harry Schropp knew the history of the SGSA as he took his usual position at the table.

The allotment of commodities from the regional SGSA was woefully lacking in quantity, quality and selection. Oranges, a long since scarce item, were still priced at fifty cents a dozen. There just weren't any. Productivity in all sectors of the grocery industry had fallen sharply since the central takeover and the LCFD had the task to allot and ration the coupons required for obtainment of food. Harry felt the power of control as each name was discussed and coupons issued. He thought, "As long as no one is less miserable than anyone else, this is the only fair method of existence. It is the pinnacle of social progress and equality." He looked up at the other committee members aware that they knew his mind had been wandering.

For a brief moment, he remembered the aroma of a freshly peeled orange followed by a faint inward smile that quickly vanished -- just like his freedom.

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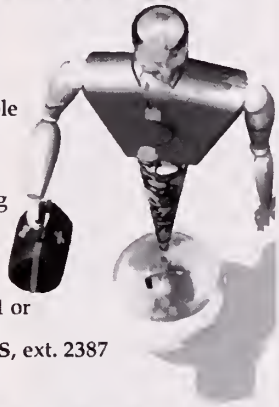

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The Road to Wisconsin

by Lynne Sears Williams

The following is reprinted with permission from Ms. Williams and was originally published in the Canadian Medical Association Journal, 15 Mars 1997;156(6). In this article Lynne Sears Williams of Calgary describes her family's decision to leave for the US, where her husband, Dr. Jim Williams, will pursue his career in family medicine. The decision was not made easily, she writes, but eventually a love for Canada was outweighed by her husband's desire to practice medicine without the financial and other constraints facing physicians in Canada.

In the Dec. 1, 1995, issue of CMAJ Lynne Sears Williams described a visit to Texas, where Americans were anxious to recruit her husband, a family physician. At that time they chose to remain in Alberta. This article recounts their subsequent decision to leave Canada for a medical practice in Wisconsin.

When you're counting the number of straws on the camel's back, it is hard to say which piece qualifies as the last one. For my physician spouse, Jim Williams, the last straw fell late one evening in a Calgary hospital room when a 47-year-old father of five had a cardiac arrest.

The anonymous patient -- I'll call him David -- had already waited in hospital five weeks for an emergency coronary bypass. Unfortunately, he had not had the "blessing" of subsequent symptoms following his first major attack and thus was further down the emergency-surgery waiting list than two octogenarian grandmothers, who obtained their bypasses two days before David was to die. The women had received their postsurgical ICU care from Jim, who during most of the wee hours that night worked to keep them alive, despite their poor postoperative prognosis. He managed to save them, at least until the next shift arrived.

No one was able to save David.

In a scene reminiscent of a badly scripted hospital drama on TV, David's wife wandered into the room as the team was running the code on her husband. "David," she said, shaking him gently. "David. Wake up."

The code team stared at her, temporarily frozen. Surreal Hollywood moments do not often make their way through the layers of hospital protocol that isolate critical care patients from their families. My husband suggested that someone take her to wait in

Lynne Sears Williams is a freelance writer and wife of physician Jim Williams.

the hallway. She was still waiting when, after a 90-minute failed resuscitation, David's code was called.

Less than two weeks later, my husband signed a contract to practice family medicine in rural Wisconsin. If he had been asked at that point what was making him commit his professional skills and his family's future to the often-maligned U.S., Jim probably would have replied that he was doing it because the doctors in Wisconsin had raised their eyebrows when he told them about the sick patients from whom he could not arrange a hospital bed.

Those same doctors winced when he told them about Alberta's long waiting lists for emergency surgery. And they simply did not believe him when he said an elective cardiology consult could take up to three months.

"Gee," one earnest physician told us at a meet-and-greet recruiting dinner, "I guess our biggest problem here would be ... well, I don't know. I suppose it would be asking the patient which cardiologist he preferred to go to." The other American doctors nodded their assent. When asked what the waiting list for coronary artery bypass surgery was in their system, they weren't sure if it was four, or maybe five, days.

That was when the fat lady began to sing. The three-year, on-again, off-again running courtship between my husband and the American recruiters was over. It was time to call the movers.

Medical concerns may have prompted the move, but financial considerations were involved as well. A salaried employee position, which my husband accepted, produces no overhead costs. We turned down offers from hospitals that wanted to employ a doctor for a limited period, and then bequeath the build-up practice to him at a later date. If you are selling your soul, we reasoned, it didn't make sense to resume the battles surrounding ever-increasing overhead costs and employer-employee relationships.

Additionally, the U.S. does not offer self-employed physicians the same tax breaks as Canada. "An employee I shall become," Jim decided, and then scooped up the paid disability, paid holidays, paid malpractice coverage and paid dental, medical and pension benefits.

The reasons behind our move are likely similar to those of many of the 777 physicians who moved from Canada in 1994 and the 674 who left in 1995. We found it philosophically unacceptable that governments continue to lower physician incomes without providing any of the benefits normally enjoyed by employees. We could easily have embraced the notion of salaried physicians in Canada if the working day was 9 to 5 and the benefits were substantially similar to those enjoyed by other government employees. However, this proposal was never considered seriously by the Alberta government, which knew it could not afford to cover the overhead costs that physicians were already staggering under.

A little knowledge can be a dangerous thing. Jim, who has been actively involved with the Alberta Medical Association (AMA), may have been privy to too many secrets concerning the provincial government's future plans. In his previous existence as an AMA negotiator, he had stumped the province for two years trying to sell Alberta doctors on managed-care proposals. Asked at a meeting if managed care is the best plan the AMA could come up with, he replied: "Certainly not. But it's much better than what the government has in mind."

One evening he received a phone call at home and I heard him agree to cover a colleague's weekend call at a hospital. "That's assuming, of course, that you can admit any patients to hospital that weekend," he told the other doctor. "I know I haven't had any luck finding beds."

And why did he have to accept this duty? So that the other physician could take a trip to Pennsylvania. He had just received an invitation from recruiters in that state.

Later, after Jim had been "outed" as a doctor who was moving to the US, a tableful of physicians in his hospital cafeteria asked why he had decided to leave now. "My family finally said I could," he said, a statement that met with nods of recognition. Apparently, many families are making the same decision.

The medical staff office at the hospital where Jim has privileges report that in previous years they used to receive fewer than 10 requests a year to have staff references forwarded to American locations. In 1996, the number increased to 40; there are 160 family physicians on staff. Similarly, the majority of 1996 medical graduates from family-medicine residency programs in Alberta chose to move south.

The government still tells Albertans that there is no medical crisis now and that none is forthcoming. However, a recent pre-election "cookie" worth several million dollars was tossed into the system in an attempt to stem voters' concerns. Among other things, it will be spent hiring 250 more nurses in the Calgary area -- replacing some of the roughly 8,000 Alberta nurses who lost their jobs during the initial cuts.

The money will also be used to recruit a kidney transplant specialist and a new cardiovascular surgeon, since Calgary has lost many of its specialists in these areas to retirement or emigration.

The detail left unmentioned is that each physician recruited will be paid from a capped global budget, meaning that when they

arrive there will be less money available for the physicians already there. The AMA predicts that doctors' compensation may drop as much as 7% this year because of the global cap and increased utilization.

One rural colleague recently confided that he had seen 95 patients in a single day in a part of Alberta that has been stripped of doctors. "It's just not good medicine," he said sadly. Another rural doctor had to deliver a baby in his clinic - the rural hospital there had been closed.

Premier Ralph Klein has previously dismissed anecdotes about overloaded waiting lists and a lack of hospital beds as media sensationalism. He said his own experience has been excellent, but many Albertans don't share his opinion. Polls show that the number-one worry among voters is fear for the future of health care. Certainly, one 47-year-old father in desperate need of a coronary bypass had reason to worry.

Jim now receives several phone calls a month from family doctors who want to discuss emigration. Based on a previous article I wrote for *CMAJ (Can Med Assoc J* 1995;153:1633-5), I have received calls from physicians wanting to hire me to negotiate their applications to emigrate to the U.S. Some of the doctors who call us have never travelled further from Calgary than Banff or Vancouver. Now, they are making plans to leave their country.

A move to the United States involves every kind of anxiety: financial, emotional and, as the stress escalates, physical. The waiting-for-the-visa game also takes a toll, and the cost is not purely financial.

To ease our transition, we have decided to take some proactive steps. We will open an Internet account in order to lower the cost of what will inevitably be homesick calls to friends and relatives. We have decided to take our first summer vacation in Canada. The children will attend their favorite Rocky Mountain summer camp and visit friends and relatives. We hope they will learn that international borders, while fixed by treaty, are not the barriers they used to be. Communication breakthroughs like the World Wide Web are guaranteeing that.

In the final analysis, we *all* decided, after much weeping and gnashing of teeth, that we did not have enough incentive to stay in our home and native land. We have kids to send to college, orthodontists to pay, retirement savings plans to begin.

Yes, Virginia, we have called the moving truck. But we are comforting our daughters with a line from a favorite book, which we repeat whenever the I-can't-believe-we're-doing-this feeling overtakes us.

Readers of the *Little House on the Prairie* series will undoubtedly recognize the biography of Laura Ingalls Wilder. The story begins like this: "For Laura, it all began in the Big Woods of Wisconsin..."

Focus on Managed Care

1500 Miles South of Alberta, Canada

by Jeremy Pittenger, contributing editor

James Williams, MD

Editor's Note: Jim Williams, MD, and his wife Lynne Sears Williams, moved their family to rural Wisconsin from Alberta, Canada in April of 1997. Before their move, Mrs. Sears Williams wrote about the trials and challenges her husband faced while working as a physician in Canada and of their decision to move to the United States. [Please see *The Road to Wisconsin* on page 29.]

Her frank account appeared in the *Canadian Medical Association Journal* last March, and left us wanting to know more. Following is an interview with Dr. Williams regarding the move from Canada and the Canadian system of health care.

JP: *In The Road to Wisconsin, your wife indicates that your decision to leave Canada was brought about by your desire to practice medicine without the financial obstacles and other constraints facing physicians. What exactly were those constraints?*

JW: The basic constraints of the Canadian medical system come down to each province having its own provincial government which controls the funding for *all* medical care that is not considered outside the scope of basic care (e.g., cosmetic surgery, dental surgery). Basically, you cannot provide those types of services outside the government set-up. So there's only one payor for all medical services in each province and that payor determines the budget and fees for all services. Unfortunately, they have been reducing budgets annually in most of the provinces for a number of years.

The big problem is that because there is only one payor there is no competitive drive for service. In the U.S., if an employer feels that they aren't getting a good deal, they can switch to a different HMO. In Canada you can't do that. There's only one HMO: the provincial government. Whatever they say goes. In Alberta for instance, we went from a very efficient, streamlined acute care system to having 20% our budget cut by the provincial government over three years. That essentially made a lean system leaner. Before the large budget cuts, it was difficult to get hospital beds for your acutely ill patients, but you could get them. It was also difficult to get emergency surgery done quickly, but it was possible – urgent care was always a priority. Now, it's not that way; certainly when I left, it was bad.

> *"If the profession is going to survive, the profession must be pro-active. The medical profession has to come together at the local, state and national level. Change is going to happen whether we like it or not."*

JP: *During your informational interviews in the U.S., Wisconsin physicians winced when you told of the long lines for medical care and problems with finding enough beds for patients. Have you experienced any such problems here in Wisconsin?*

JW: No. Physicians here have a hard time believing the horror stories I share with them. For example, it took me eight months to get a patient with severe osteoarthritis a hip replacement and she was four to six months ahead of where she would have been if I hadn't pulled in some favors. Here that simply wouldn't happen. We have way more specialists, way more hospital resources available -- people just can't imagine that there would be that kind of rationing of care.

JP: *How do the American and Canadian governments differ in terms of support for physicians?*

JW: To be honest, I don't think either one is too interested in being supportive. You have to think of the Canadian government much like an HMO Board of Directors. They really don't want to have much to do with the

system. They just want to see the balance sheet looking good at the end of the quarter. They will play lip service to saying, "We want good quality of care." But that's not really what they are interested in; they are interested in the bottom line. Dollars are being spent because doctors are saying this is what it takes to provide good patient care. Hence, doctors are looked at as a liability in Canada; the fewer doctors the better.

We've been told by the Canadian government and their "think tanks" for the past 10 to 15 years that there are too many doctors. That just couldn't be further from the truth. The workload that doctors are working under in Canada is just unbelievable. It's extremely difficult just to maintain the level of care for the population that's already there. They are way understaffed -- there are way fewer doctors than there really should be.

In the U.S., I'm not sure what the government thinks because I haven't been here for too long -- aside from watching and reading the news. But, governments don't have the same direct interest in the health care system where they are responsible for costs. They don't seem to have the same antipathy -- at least I'm not seeing evidence of it.

JP: *How do patients' health and attitudes differ in Wisconsin compared to Canada?*

JW: It's much better here. Patients recognize that physicians offer a service of worth, they have respect for the learning required and respect for the payment that is rendered at the end of the visit. In Canada, a large proportion of my patients resented the fact that I was charging the government for my services. They felt I should be performing my services for free -- sort of like a religious sacrifice. Medical care has become free to the consumer, therefore it is worthless.

Doctor bashing in Canada is a popular pastime. For about a year, I stopped buying the newspapers because on a daily basis there would be at least one article slamming the medical profession. Everyone I have talked to who has moved to the U.S. has commented on this. None of us could take the constant criticism -- it's just totally unjustified.

JP: *What is your perception of managed care in the United States?*

> *"That's where the horror stories are coming from: places where managed care has moved in quickly, fragmenting the profession and pitting one group of physicians against another to discount fees and costs."*

JW: I can only speak of what I know of managed care from the research I did while in Canada. This was during the time when we were trying to come up with a medically rational approach to managed care because this was what our government was trying to shove down our throats. It seems the places having the worst time with managed care are those highly populated areas where managed care came in like gang busters. In those areas, there was also a concomitant surplus of physicians. So the managed care companies were able to use that as leverage to discount physician fees and hold physicians over a barrel. That's where the horror stories are coming from: places where managed care has moved in quickly, fragmenting the profession and pitting one group of physicians against another to discount fees and costs.

In places where it seems to have worked best is where doctors have seen it coming and they have banded together and organized themselves. They meet managed care corporations head on and say, "No. You don't dictate to us, we will negotiate with you and we're also going to negotiate with the other guys. If you mess with us, it's 'good-bye.' "

I think that's the only way for physicians to survive with any sense of professional autonomy -- they have to take an aggressive, organizational approach. In such a situation you have to say, "No, I'm not going to be an independent practitioner, but part of a group of physicians." A lot of doctors, it seems, can't stand that -- the ones still working under the Marcus Welby model. Unfortunately, you won't survive in that mode because managed care corporations have far too much power.

JP: *What role do you see organized medicine playing in your practice?*

JW: The Canadian Medical Association (CMA) is a different organization than the American Medical Association (AMA) in that it is more active and has a higher profile to physicians in terms of providing services to physicians (e.g., investment services, educational resources). It is politically very active, like the AMA, but I'm not sure that it is higher regarded by the public at large. Unfortunately, doctors in Canada are pretty much seen as having horns and a tail.

JP: *I'm surprised at the amount of disrespect and hostility aimed at the profession in Canada. Were there any public relations campaigns to counter this activity?*

JW: Oh yes. We had a very successful campaign in Alberta. We aimed it with the attitude that patients are hurting from the hatchet job that the "bean counters" are doing on the health care system.

It hurt the government quite badly, which of course we are paying for right now. We were effective, but when we did an evaluation of the campaign we found that we maintained the individual person's view that their own doctor is a good guy, but they still had this sense that the profession as a whole was corrupt and out of control. It was as if people were saying, "My doctor's okay, but the rest are out of line."

Needless to say, we felt pretty hopeless after that. How can we possibly get people away from that attitude? We can thank 30 years of socialized medicine for that.

JP: *Your wife also mentioned that you were "outed" as a doctor who was moving to the United States. How were you treated by your colleagues?*

JW: My colleagues, for the most part, were very supportive. Some did express regret that I was leaving. A lot of them, a huge amount as a matter of fact, contacted me about how to start the process of moving to the States.

JP: *Do you have any advice for physicians in the United States who are frustrated with the American health care system?*

JW: I always tell people that they have no idea how bad it can be elsewhere. I think Canada is probably the worst out of all the industrialized countries. The gentleman who bought my practice is South African. He left South Africa about six years ago. He built up a practice in Canada and then bought my practice for a very small amount because you just can't sell a practice in Canada. I saw him this summer and he's planning to move back to South Africa. He told me that of everybody (about 15 to 20 South African doctors) he came over with, he is the last one still there. They have all left in the last six to ten years. They were that horrified at how the Canadian health care system has fallen apart. . .of course the government denies it.

> *"We can band together and organize then we will succeed and we will be able to generate a rational system...I believe this is the key to survival as a profession -- banding together."*

If the profession is going to survive, the profession must be pro-active. The medical profession has to come together at the local, state and national level. The profession must unite and not just sit back on our heels and fight change. That's useless. Change is going to happen whether we like it or not.

For example, as a colleague of mine from Canada put it, there is a steam roller coming down the road toward you. You have time to prepare, but what are you going to do? You're not going to be able to stop the steam roller and you can't push it back. You can either be run over, you can run away or you can jump up on the steam roller and drive it yourself. American doctors must jump on that steam roller and start planning how managed care is going to be done.

In the places where I have seen managed care working really well, large numbers of physicians, let's say 80% in a local area, form an organization and they approach the managed care organization and say, "Here, this is us. If you want to make money in this area you have to be fair and negotiate and you cannot provide poor service for the patients nor can you discount the value of physician services."

If you take this kind of attitude, managed care can be rational. However, as long as physicians continue wanting to do this in small groups, they'll never survive. We'll all end up being insurance company employees. But, if we can band together and organize then we will succeed and we will be able to generate a rational system. In Canada or the U.S., I believe this is the key to survival as a profession -- banding together.

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Physician Workforce Issues

Marc Kennedy, special to WMJ

Physicians forming a union? There was a time when that would sound about as odd as Luciano Pavarotti starting a rock 'n roll band, or Bob Dylan performing *The Barber of Seville*. But the times they are indeed a-changin' in the delivery of health care. More physicians are joining large managed care entities either directly or as subcontractors. And, many doctors are finding themselves in a back-up role instead of playing lead when it comes to making decisions about practicing medicine, causing them to voice concern that this erosion of autonomy may be adversely affecting patient care.

Not content to merely sing the blues, many physicians are seeking ways to increase their capabilities to mitigate incursions by managed care entities into patient treatment, which they see as based on primarily business rather than medical imperatives. This is leading physicians to seek strength in numbers, in some cases through traditional channels of mediation, such as local and state medical associations, and the American Medical Association. But in several instances across the country, frustration over lack of leverage and increasing concerns over quality of medical care and control over how it is delivered has prompted physicians to consider unorthodox methods to ensure that their voices are heard. More physicians have begun discussing, and in several cases, voted, to add their names to, the union roll call.

Concern Over Lost Autonomy

"Up until five or six years ago, not as many doctors were employed by large managed care or hospital systems. But now medicine has gone from less of a 'cottage industry' of individual practitioners to more of an organized industry," says John Konkel, MD, President of Falls Medical in Kenosha.

"Problems have arisen when doctors in these situations begin to feel that they no longer have a voice in caring for their own patients. They find that their autonomy has been chipped away, and there is some frustration because the managed care organizations are making medical decisions, but the physicians are the ones that are taking the risks."

These issues of liability and other concerns regarding lack of input into issues such as utilization review, cost containment and practice parameters are leading physicians around the country to seek new ways to increase their bargaining power with large health care providers. In Wisconsin, the issue has yet to come to a head, perhaps because there still are a majority of self-employed practitioners in the state. But interest is growing.

In June, the county medical societies of Racine and Kenosha sponsored a panel discussion pertaining to increasing the negotiating power of physicians through unions or other means.

"Interest is increasing in the state in finding ways to expand representation for physicians and gain bargaining power, and a recurrent theme is the subject of unions," adds Konkel, who served on the panel at the meeting.

"But it may become more of an issue in the near future, as large health care entities continue to expand. Managed care is becoming a potent force in Wisconsin. In Madison, there are Dean, UW Hospital, and Physicians Plus, and in Milwaukee there is Advanced Health Care, Covenant, Aurora,

and Horizon. Upstate there is Mayo, Gundersen and Marshfield. Hospitals and health care groups are also joining forces. In this area, one hospital is considering joining Covenant, another is talking to Aurora."

Konkel is not saying that there are necessarily problems with these specific managed care entities, merely that expansion of these providers is becoming a fact of life in the state, and that given what has been happening around the country, physicians in Wisconsin should be aware and prepared to address potential areas of conflict now.

"Doctors should be willing to partner with these organizations, and I think we are here," he says. "But we need to be able to do so with one voice, especially when it comes to medical management. Personally, I think our patients would welcome that. They expect that doctors are the driving force behind medical treatment, and I think we are letting them down by not organizing.

"There are some physician groups in the first steps of organizing in Wisconsin. The hope is to achieve the ability to influence how medicine is going to be practiced. It is difficult for individual doctors to equalize the capabilities of well-financed organizations. Unless doctors are willing to organize more effectively today, to speak with one voice, in five years or so they will be at the mercy of better organized health care entities."

Union Activity on the Rise in Arizona, Florida

Physicians in other states have found this happening and have responded. Last year, the American Podiatric Medical Association announced that it was working with the Office Professional Employees International Union to form a union for podiatrists. Also, in November 1996, the National Labor Relations Board regional director ruled that physicians working for the Thomas-Davis Medical Centers, PC in Tucson, AZ, could form a unit to collectively bargain with their employer.

The Florida Medical Association called for action at its annual meeting and resolved to "seek means to remove restrictions for physicians to form negotiating units" on behalf of its 17,000 members to counteract the power of managed care organizations that have continued to reduce physician rates and amount of control over medical issues in recent years.

"One physician against the company is not a level playing field," according to FMA President Cecil B. Wilson, MD, of Winter Park in an interview with the Tampa Bay Business Journal. "It's generally on a take-it-or-leave-it basis."

The consensus at the FMA meeting was not to pursue models based on a traditional union, for now, as well as to urge action by the American Medical Association to address this issue. The AMA did so at their annual meeting this summer, at the behest of state medical societies from New York, New Jersey, Georgia and Texas, among others.

AMA Supports Aggressive Representation

In a report to the Board of Trustees this summer, AMA Board of Trustees Chair Nancy Dickey, MD, outlined the circumstances surrounding the issues of lack of physician control in managed care situations. The Board said it supported efforts by physicians to organize and negotiate and stated that the AMA intends to develop a new Division of Representation within its Group on Health Policy Advocacy.

"This division will work with state and county medical societies that also want to respond to physicians' desires to be represented more aggressively. Since this kind of aggressive representation of physicians is best carried out at the local level, the Board of Trustees recommends that state and county medical societies set up similar units to fulfill this role," according to the AMA board report.

The AMA identified several key areas for which physicians are seeking aggressive representation in problems arising from their relationships with health plans, including:

- Lack of input into medical policy, incorrect medical necessity determinations, questionable clinical parameters.
- Declining income — health plans are driving down payment rates, sometimes in ways that threaten access and are rarely the result of true negotiation.
- Job security — physician practice viability is threatened when health care entities restrict the size of their panels.
- Inefficient utilization control and payment procedures that raise the cost of physicians' practice.

The AMA supports doctors in their efforts to exert more control over their own practices, but does not officially endorse unionization at this time, primarily because under existing law, it is illegal for most physicians. Also, it believes that there exist other means to accomplish the same objective, as stipulated in the AMA Board of Trustees Report of December 1996.

"In the present political climate, it is not realistic to expect the antitrust laws or the federal labor laws to be changed by Congress or the courts to allow independent physicians to engage in collective bargaining. The nation is preoccupied with controlling the cost of health care, and allowing physicians to engage

in collective bargaining is perceived to be inflationary. In addition, the public does not perceive physicians to be working under the kind of hardships that would warrant extending collective bargaining rights to them. The average income of physicians is still substantially above the national averages. However, the AMA will continue to advocate the right of independent physicians to engage in collective negotiations."

Physicians who are self-employed, even if they sub-contract with health care plans, are technically not legally able to participate in collective bargaining under the current law based on the regulations of the National Labor Relations Act. However, the law does allow physicians who are employed by the government or other entity, to be represented by a union and engage in collective bargaining. Such unions have ex-isted for several decades in the U.S.

Physician Union History

In 1957, the Committee of Interns and Residents (CIR) was founded to lobby for residents working in hospitals. Two of the largest physician unions, the Union of American physicians and Dentists (UPD) and the Federation of Physicians and Dentists (FPD), began in 1972 and 1981, respectively. Today, the AMA estimates that between 14,000 and 20,000 physicians are union members, including between 6,00 and 9,000 residents, many publicly-employed physicians and about 3,000 independent practice doctors.

But these numbers may grow, as disenchantment with some of the practices of manage care entities increase dissatisfaction among physicians. Two unions are actively soliciting physician members: the Office Professional Employees International Union (OPEIU) associated with the AFL-CIO, and the Service Employees International Union (SEIU). SEIU has 1.1 million members, 475,000 of whom are health care workers. This union and CIR recently announced they would join forces and would commit $1 million next year to organizing doctors. With 9,000 members nationwide CIR is one of the largest physician unions.

UPD, representing about 5,000 physicians, boasts members that are self-employed as well as employed. It can do so by charging lower membership rates for self-employed physicians; in effect, these doctors pay a one-time fee to join an independent practice association (IPA) which in turn is managed by the union.

Unless the laws change concerning self-employed physicians engaging in collective bargaining, those interested in organizing to bolster leverage against unfair management practices will need to consider joining such IPAs, or create their own advocacy groups or, preferably, work through their county and state societies, all of which are viable options.

At this point, the AMA would rather focus on relying on county and state medical societies in helping represent physicians, and call upon them to increase their efforts in this regard. The AMA estimates that currently about 45% of physicians nationwide are now employed, and therefore technically eligible to join a union and engage in collective bargaining.

Options for Wisconsin Physicians

Conditions here have yet to prompt Wisconsin physicians to do more than gather information and conduct introductory information-sharing discussions on how to increase bargaining power in managed care situations, as opposed to the measures taken in other states recently. Some Wisconsin physicians don't think that their colleagues should jump on the union bandwagon just yet.

SMS Recommendations on Unions

The State Medical Society of Wisconsin has employed most of the strategies available to assist its members and their patients in aggressively representing them in the evolving health care system. The SMS will continue to work closely with the AMA, county medical societies and specialty societies to collect information, share ideas and develop strategies to support Wisconsin physicians and their patients, promote quality health care delivery and to respond to member physicians' desire for more aggressive representation.

Results of the recent SMS census and needs assessment of membership indicate that advocacy is the number one benefit members derive from their Society. The SMS is committed to developing methods to enhance representation, such as forming a separate entity, union or management services organization, and the professional image of physicians in Wisconsin.

For more information on the SMS advocacy efforts, contact Mike Kirby, CAE, SMS VP Public Affairs (please see this month's EVP report on page 6) or Maureen O'Brien, SMS VP Membership and Professional Development.

Konkel sees the recent NLRB ruling recognizing the right of the Thomas-Davis Clinic doctors to engage in collective bargaining as "a mixed blessing."

"It's good that they have taken it upon themselves. But these are the same doctors who did not want to manage the clinic business, so they sold out. Then they found that this forced them to change the way they practiced medicine. It would have been

Union and Representation Considerations

Before physicians battling with employers or managed care contractors begin considering union membership, the report issued recently by the AMA Board of Trustees identified several issues for physicians and medical societies to consider when pondering the prospects of either creating or joining a union.

Eligibility. Due to restrictions in the National Labor Relations Act and subsequent legislation, self-employed physicians and physicians who are considered managers or supervisors cannot engage in collective bargaining. However, this does not prohibit medical societies from acting as a labor organization on behalf of its physician members. However, the AMA also pointed out some potential conflicts of interest.

Physician Ownership in HMOs. Members of boards of trustees of medical associations may also be owners of HMOs or health plans that are the objects of potential collective bargaining actions. This creates a conflict of interest.

Tax exempt status. Acting as a labor organization may compromise a medical society's tax exempt status. To maintain its 501(c)(6) designation, an association must act to benefit all physicians, rather than a segment or subset. In this case, a union could not represent self-employed physicians, who cannot engage in collective bargaining. If a medical society is considering organizing a union, the AMA suggests that is may be in its best interests to create a separate organization to act as the union.

A noted expert in the field of medical labor practices lends some advice concerning the concept of beginning a union:

"If you are contemplating further investigation of a union model, I caution you to go easy on the rhetoric about using a union affiliations to gain leverage in negotiations with managed care companies," wrote Philip H. Lebowitz with the Philadelphia law firm of Pepper, Hamilton Scheetz in an article for *Physician's News Digest* of Pennsylvania. "The FTC and Justice Department are wary and watchful that non-employee physicians not use the union or guild label to mask what they would view as price-fixing or concerted boycotts or refusals to deal."

Suggested Strategies

While the AMA Board report supports physicians in efforts to increase leverage in managed care organizations, it does not endorse per se union activity. However, the report outlines actions physician organizations can take in supporting all their physician constituents, both employed and self employed:

- **Legislative and Judicial Advocacy.** Medical societies can reinforce efforts to aggressively represent physicians and patients in the courts and legislatures.

- **Advocacy on Medical Policy with Managed Care Organizations.** Federal Trade Commission and Department of Justice Guidelines issued in August 1996 allow medical societies to approach health plans with concerns over medical policies that physicians have identified as harmful to patients. Societies can assemble supporting information and make a case on the physicians' and patients' behalf to change the policy.

- **Under no circumstances can physicians or physician organizations threaten or lead a boycott.**

"There needs to be a forum for physicians to air concerns, to find a way to help doctors and health care plans to resolve problems, but physicians cannot go on strike," says SMS President Sandra L. Osborn, MD. "Morally, patients need to be cared for" so striking is not an option.

- **Advocacy about the "hassle factor."** While societies cannot directly negotiate payment, they can represent physicians over non-fee related issues, the so-called "hassle factors." Included, according to the AMA, are: "inefficient administrative processes that raise physician's costs, undue delays in pre-authorization of services, delays in paying claims, poor grievance procedures, and others."

- **Representing Individual Physicians.** A medical society can represent physicians individually or as a group, providing additional information to the health plan and propose solutions. Dr. Osborn reminds physicians that the SMS, through the Office of General Counsel and as a service to its members, offers to review physician employment and managed care contracts and will help physicians, to the extent allowed by law, in their negotiations with managed care organizations.

better if they continued to be self-employed, not by (some organization) with different ideas about practicing medicine which ends up frustrating the physicians."

Though conditions have not created such animosity here, it is not as though relations between managed care health plans and physicians are entirely copacetic.

"It's not so much bubbling to surface; it's more of an undercurrent grumbling" says Betsy Adrian, Executive Vice President of the Medical Society of Milwaukee County, about relations with large health care entities.

"Joining a union or other bargaining organizations is a big step for doctors to contemplate, since unionization is something that professionals usually don't consider.

"My personal opinion that there has been a honeymoon phase that has taken place with doctors whose practices have been acquired by big delivery systems. The rubber seems to meet road when it's time to renew the initial contracts. Everything was hunky-dory on the first go-round. Then the second time, issues are put on the table that were not up for discussion at first: productivity, salary, number of patients to see in a day. These issues don't surface until you have a history. Then the health planners say 'this is what you've done in the last few years, this is what we want you to do now.' "That's the moment when many doctors' eyes get opened."

This can be a rude awakening for many who had been used to calling their own shots.

"The difference is who has ultimate control," adds Adrian. "Previously, you could decide how much time to schedule for certain problems. Suddenly, you don't have that ability. Someone else is saying to an internist, 'you see 20 patients a day,' or to a pediatrician, 'you see 30 a day.'

"That doesn't allow flexibility – the organization watching over your shoulder; having to justify your actions to someone else about why you took longer to see certain patients."

Adrian reiterates that relationships between managed care providers and physicians can and do work well, but it takes work as well as the right combination of people, additional training and the appropriate approach.

"A lot of hospitals that know the hospital business have not successfully managed physician practices, just as many individual physicians know how to run their own practice but not how to manage a large clinic."

"It's a difficult time in health care," says SMS President, Sandra L. Osborn, MD. "It always is during any transition. With so many aspects changing, it makes everyone uncomfortable. Some handle change better than others. But looming large in background is the issue of patient care. Physicians want the best care possible for their patients."

If physicians perceive certain health plan practices as detrimental to their patients, they will respond negatively. However, Osborn emphasizes that doctors need to keep an open mind — though some managed care practices may rub them the wrong way, they still may be best for patients.

"A recent issue of *JAMA* included a study from California indicating that HMO care for people at end of life does as good if not better job at less expense," says Osborn.

"We need to keep watching this, continuing to evaluate ourselves and our practices and see which aspects of managed care are going to enable us to do a better job."

The Medical Society of Milwaukee County is monitoring the growth of its physicians in managed care plans, and aims to adjust its services accordingly.

"In 1998 we're looking at developing services targeted to our increasing numbers of employed doctors, and more residents looking for this type of arrangement. This is something new," says Adrian.

"We probably won't see as tremendous growth in employed physicians as in other parts of country. Doctors here are still pretty independent. I think Milwaukee will continue to be bastion of private practice. And, we're not abandoning those who are independent practitioners by any means."

In any event, says Adrian physicians need to be prepared to organize, either with help from the MSMC or other county societies, the SMS, and the AMA, through doctor-supported IPAs, or some other group when dealing with large health plan organizations.

"Physicians need to deal with managed care as a group," she says. "Otherwise, you get fragmented, and end up with little bargaining power."

Whether or not Wisconsin physicians end up singing praises of the union cause may depend on a variety of factors: the number of physicians large health plans ultimately will encompass; how deeply managed care and cost-cutting tactics will reach into individual doctors' daily practice routines, and how in turn this influences care for their patients; and how amicable or hard-headed the large health systems will be concerning differences with physicians.

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Clinical Pathways Offer Route to Optimal Patient Care

by Thomas C. Meyer, MD, Madison

Perhaps the most impressive contribution to patient care in recent years has been the serious attempts to ensure that no detail of "the optimal care for every patient" is overlooked in the face of decreasing hospital stays and the increasing complexity of care. The most visible evidence of these efforts are the protocols that are being produced and used at various institutions around the state and the nation.

The development of these protocols is time-consuming and tedious, but it is ultimately rewarding for those who toiled through countless meetings to produce the necessary documents, to those who use them and ultimately, it is hoped, for the patients who enter the pathway/guideline/protocol (P/G/P).

There seems to be consensus that the development of each of these P/G/Ps:

1. takes anywhere from 120-800 "person-hours" to develop, depending on the sophistication of the protocol;
2. provides a welcome forum for interdisciplinary and multidisciplinary interaction which improves morale among all those responsible for the care of the patients;
3. has to be done by the staff of the particular institution in which it is to be used. The "buy-in" is crucial and the only use for a P/G/P being used at another institution is to generate ideas.

The *WMJ* collected P/G/Ps in use at a few institutions in Wisconsin and received permission to reprint selected portions of four of them. R.S. Sundaram, MD, LaCrosse, was kind enough to outline something of the background methodology (grief and tears) and current usage of the Chest Pain Pathway at his institution. If the other authors had been asked to do it, I'm sure their stories would be much the same.

Data on perceived effectiveness was not requested – it is still too early for that. One of the institutions enclosed a copy of a memo to "____ Pathway Members" entitled "Updates." The memo showed that the average length of stay for radical prostatectomy was 4.12 days **before** pathway and is 3.08 days in year-to-date with no major complications. No details, but enough incentive to keep the team working on another pathway!

Pieces of each of the four P/G/Ps follow and show how very different the working documents are. Each institution has consented to send the full document to anyone interested. The introduction includes the contact from whom to obtain the full document or more information. We hope you find the approaches interesting and begin to think about how a P/G/P may be put into practice in your department.

Thomas Meyer, MD, is the Director of Continuing Medical Education at the University of Wisconsin and Emeritus Professor of Pediatrics; he is former Vice-President for Medical Affairs at St. Marys Hospital Center (1986-95).

The Chest Pain Care Pathway at Gundersen-Lutheran Medical Center

by R. S. Sundaram, MD, La Crosse

Gundersen-Lutheran Medical Center in La Crosse, WI, is a combined clinic-hospital complex employing some 300 primary and specialist physicians. We have 410 beds, including an 18 bed coronary care unit, in our in-patient area. There is also a combined medical and surgical intensive care unit that is physically separate from the CCU.

Patients admitted to the CCU may be cared for by primary care physicians or specialists. Although consultation is often requested by primary care physicians of specialists, this is not mandatory. There are active internal medicine and transitional residency programs at the Medical Center. Teams composed of consulting staff physicians and residents care for patients in both critical care units and on regular patient wards; there are no separate CCU or ICU teams. At our Medical Center, we have embraced this approach as the one that provides the best in continuity of patient care and also the best in resident education.

This approach also may result in the greatest variance (from a theoretical standard) in patient care for a given condition, not always a good thing in the 1990s. The nature of medical practice in the 1990s has made it imperative for medical centers to improve the quality of care they provide and to do so at a lower cost. Usually, the more the variance that is present in patient care from a given standard, the lower the quality and the greater the cost.

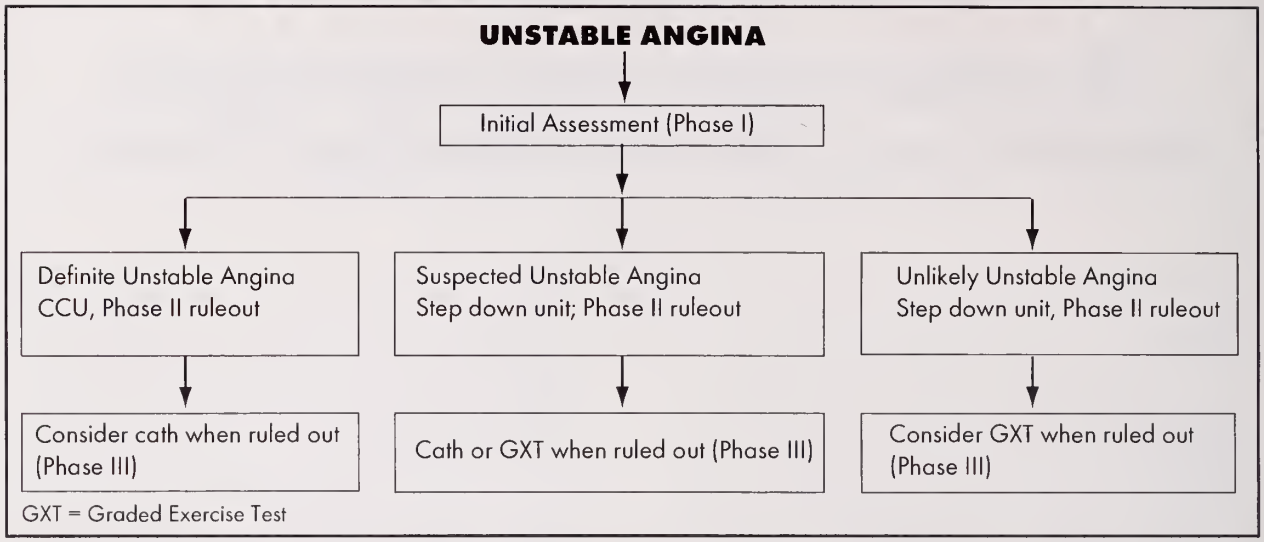
Fortunately, reducing the variance does usually reduce the cost of the care provided *while improving the quality*; this has been a strong impetus for us at Gundersen-Lutheran Medical Center to define standards of patient care and to implement care pathways that attempt to reduce variance. We now have care pathways in cardiac surgery (for the postoperative care of patients), cardiology (Chest Pain Care Pathway), internal medicine (Deep Vein Thrombosis Pathway) and neurology (Stroke Care Pathway). More care pathways are in development. The rest of this article will deal with the development of the Chest Pain Care Pathway in the section of Cardiology. We identified chest pain as a condition that, while subject to some variance in patient care at our institution, was also one for which a standard could be defined.

Readers wishing to know more about the Chest Pain Care Pathway at Gundersen-Lutheran Medical Center are welcome to contact R. S. Sundaram, MD, Section of Cardiology, Gundersen-Lutheran Medical Center, 1836 South Avenue, La Crosse, WI 54601; (608) 782-7300 or e-mail: rsundara@gc.gundluth.org.

DEVELOPING THE CHEST PAIN CARE PATHWAY

It was only logical that we in the section of cardiology be the ones to lead the way in the development of a Chest Pain Care Pathway. What we found most difficult at first was agreeing amongst ourselves on what the "standard" of care should be. We had many, many meetings to hammer out definitions for the various categories of chest pain and more meetings to decide on what the diagnostic and therapeutic approaches should be for each category. We had to keep in mind that the guidelines we would devise for our institution had to be flexible enough to allow for the inevitably different philosophies house staff, internists, family physicians, non-invasive and invasive cardiologists (all of whom manage patients with chest pain in our institution) would have on the management of these patients. At the same time, because so many people of widely differing backgrounds would be using the Pathway, it had to be simple to use while being sophisticated in its focus. This made the job of devising the Care Pathway for a condition as broad in scope as chest pain much more difficult than for certain particular conditions, such as stroke or some surgical conditions, where only a handful of physicians or surgeons, who would be of the same specialty and therefore be predicted to have less diverging philosophies on patient care, would be using them.

As our starting point, we looked at published guidelines for Managing Unstable Angina from the Agency for Health Care Policy and Research. We



quickly found out that we could not use these guidelines, as they were written, for our institution. Every medical center is unique in some way; what is done at one cannot be transplanted whole to another. Medical centers wanting to use care pathways must devise their own or customize existing pathways to work in their unique environments.

After we had drafted an initial Chest Pain Care Pathway in the section of Cardiology, we then invited opinions from everyone who would be involved using and implementing the pathway. We showed the drafts to consulting physicians, residents, allied health care providers such as physician assistants and nurse practitioners, staff nurses and ward secretaries (who would be processing the orders) in the following departments: internal medicine, family medicine, emergency room, ICU, CCU, and cardiac rehabilitation. We also invited opinions from technologists in our stress testing, echocardiography, nuclear medicine and clinical laboratories (all of whom would have to be ready for workload changes that the pathway might bring). Each group was happy to be involved and made many useful suggestions. About 800 man-hours were spent in developing the pathway.

The Pathway as it currently exists is shown in the following pages. The principles of the Pathway are as follows:

1. We have separate pathways for managing myocardial infarction and for managing chest pain. We have shown the Chest Pain Care Pathway.

2. We have categorized chest pain as "definite unstable angina," "suspected unstable angina" and "unlikely unstable angina." These correspond to patients who we feel are at high, intermediate and low risk, respectively, of short-term cardiac morbidity. We provide definitions for the various categories.

3. We have provided order sheets specific to each category of chest pain. We divide each category into three phases: initial assessment (phase I), a rule-out MI phase (II), and a risk

DEFINITE USA (15%)

- Chest pain with new ST or T wave changes
  - ST segment changes ≥ 1 mm, T wave inversion ≥ 1 mm in leads with dominant R waves
- Typical Angina at rest ≥ 20 Minutes
  - Implies typical history
  - Reoccurrence of angina in a patient with known CAD
- Chest pain with development of LV dysfunction
- Post-infarct angina
- "Flash" pulmonary edema, regardless of pain
- Admit patient to CCU and enroll in chest pain pathway

SUSPECTED UNSTABLE ANGINA

- No definite objective evidence for ischemia
- Chest pain > 20 min that may be angina

UNLIKELY UNSTABLE ANGINA

- No definite objective evidence for ischemia
- Chest pain >20 min that may NOT be angina but patient characteristics (i.e. risk factors) make a ruleout for MI advisable

USA = Unstable Angina
CAD = Cararary Artery Disease
CCU = Cardiac Care Unit

Stamper Plate

CHEST PAIN CARE PATH
(Initial Assessment and Treatment)

(QI - not a permanent part of record)

DATE: _____

Following orders are STAT:

____ 1. Allergies: _____
____ 2. O2 @ 2L/NP
____ 3. 12-lead EKG, repeat PRN
____ 4. IV: 0.9 NS @ TKO
____ 5. Aspirin 162 mg. P O.
____ 6. IV Heparin Protocol
____ 7. IV NTG Protocol
____ 8. Morphine Sulfate 2 mg. IV
____ 9. Labs. CBC, NA, K, Glucose, Cr., CPK with MB if CPK elevated, UA, INR, PTT if indicated
____ 10 Chest X-Ray
11 Diagnosis:
____ a. Definite MI - If yes, refer to Acute MI Protocol Orders
____ b. Definite unstable angina (Form #220)
____ c. Suspected unstable angina (Form #218)
____ d Unlikely unstable angina (Form #219)
____ e. Not Angina
12. Disposition:
____ a. CCU
____ b Cath Lab
____ c. GXT
____ d Home
13. Admitting Service:
____ a. Cardiology
____ b. Internal Medicine
____ c. Other: _____

SIGNATURE _____

PLEASE RETURN TO DIANE LARSON, RN IN CCU

DL:blsqicarpth 6/97

Figure 1

MEDICATION AND DOCTORS ORDER FORM
LUTHERAN HOSPITAL-LA CROSSE
LA CROSSE, WISCONSIN 54601

PATIENT NAME
CLINIC NUMBER

(FORM #217)

Imprint Patients Name Here

DATE AND TIME ORDERED - PLEASE WRITE MEDICATION ORDERS BETWEEN THE DASHED LI

CHEST PAIN PROTOCOL - PHASE I
(Initial Assessment and Treatment)
#1-13 to be completed within 30 minutes of triage

DATE _____

Following orders are STAT:

1. Allergies: _____
2. O2 @ 2L/NP.
3. 12-lead EKG, repeat PRN.
4. IV: 0.9 NS @ TKO.
5. Aspirin 162 mg. PO.
6. IV Heparin Protocol.
7. IV NTG Protocol.
8. Morphine Sulfate 2 mg. IV q.5 minutes to max. of 10 mg q.3 hours PRN.
9. Labs: CBC, NA, K, Glucose, Cr, CPK with MB if CPK elevated, UA, INR, PTT if indicated.
10 Chest x-ray
11. Diagnosis:
____ a. Definite MI - If yes, refer to Acute MI Protocol Orders.
____ b Definite unstable angina (Form #220).
____ c. Suspected unstable angina (Form #218).
____ d. Unlikely unstable angina (Form #219)
____ e. Not Angina.
12. Disposition:
____ a. CCU.
____ b. Cath Lab.
____ c. GXT.
____ d. Home.
13. Admitting Service:
____ a. Cardiology
____ b. Internal Medicine
____ c. Other: _____

Revised: July 1997

SIGNATURE: _____

Under Authorization from the P & T Committee another generically equivalent drug (identical in form and content) may be substituted for the drug ordered.

Figure 2

assessment phase (III). We recognize a patient may cross over from one category to another if an updated diagnosis is necessary.

4. We have devised the Pathway so that cardiac catheterization is the preferred method of risk stratification for high risk patients, stress testing for low risk patients and a choice of either method is available for the intermediate risk patients.

5. We provide specific recommendations for the medical management of patients in each category in regards to heparin, aspirin, beta-adrenergic blockers, nitroglycerin and other agents. To help us gather data and to monitor compliance with the pathway's guidelines, users of the pathway must indicate their reasons for deviating from the pathway's recommendations.

6. We provide specific time intervals for the performance of laboratory and other tests.

The Chest Pain Care Pathway, like every other care pathway in existence, is still in evolution. We have not had it in place long enough for us to have obtained any meaningful data on how it has influenced the clinical practice, or "outcomes," in our institution. Nonetheless, we can make several initial observations:

1. Contrary to what we expected, the Pathway has been well received by everyone who is responsible for using it. We are very pleased by this and attribute it to our having involved so many people in the development of the Pathway.

2. We are much more consistent in our definitions of chest pain than we were previously. We cannot help feeling that more consistency in defining chest pain will only lead to more consistency in managing it.

3. We have been able to staff our CCU more efficiently because the acuteness of a patient's condition (as evidenced by what category of chest pain he or she is felt to have) is now known prior to the patient's coming to the CCU. Low risk patients are staffed at a lower nurse-to-patient ratio than higher risk patients.

4. We have noted a heightened awareness of the need to streamline the care of any patient with chest pain, from admission to discharge, on the part of everyone involved in the care of such patients.

Fortunately, we will have objective data in the future to judge the effectiveness of our Pathway. Some time ago, we invited a health care

Gundersen Lutheran
1910 South Avenue, La Crosse, WI 54601

(FORM #21B)

Imprint Patients Name Here

PATIENT NAME
CLINIC NUMBER

DATE AND TIME ORDERED - PLEASE WRITE MEDICATION ORDERS BETWEEN THE DASHED LINES

SUSPECTED UNSTABLE ANGINA PROTOCOL
Phase II (12-24 hours following entry into pathway)

DATE: _____

1. Admit to _____ Service.
   a. MD to assess patient upon arrival.
   b. If patient unstable refer to appropriate protocol.
2. Risk: Low_____ Medium_____ High_____
3. Vital Signs: q.4 hours while awake and PRN.
4. Allergies: _____.
5. Code Status: _____.
6. Activity:
   a. Bedrest with BSC x _____ hours.
   b. Other: _____.
7. Continuous EKG monitor with ST-segment monitoring.
8. Notify MD of chest pain.
9. Instruct patient and family about symptoms and treatment of heart disease, and in a heart-healthy lifestyle per teaching practice guidelines.
10. Diet: a. NPO x _____ hours.
    b. Protocol: _____.
    c. Other: _____.
11. Medications:
    a. Continue NTG gtt.
    b. Continue Heparin grt per Heparin Protocol.
    c. Aspirin 162 mg. PO QD.
    d. Beta blocker (if patient already taking med).
       Dose: _____.
    e. Morphine Sulfate 2 mg. IV q.5 minutes to max. of 10 mg. q.3 hours PRN.
    f. Tylenol 325-650 mg. PO q.4-6 hours PRN.
    g. AAOC PRN.
    h. LOC PRN.
    i. Sedation: _____.
    j. Sleep: _____.
    k. Arrhythmia Protocol (completed attached protocol).
    l. Other Medications:
       (1) _____.
       (2) _____.
       (3) _____.
       (4) _____.
12. Continue O2.
13. Continuous O2 Sats.
14. 12-Lead EKG
    a. Upon arrival to CCU.
    b. In _____ hours and in AM.
    c. STAT with chest pain.
15. Chest x-ray (if not already done).
16. Labs: a. CPK q.6 hours x 3, CK MB if CK elevated.
    b. Other: _____.

Revised: July 1997

SIGNATURE: _____

Under Authorization from the P & T Committee another generically equivalent drug (identical in form and content) may be substituted for the drug ordered ☐

Figure 3

MEDICATION AND DOCTORS ORDER FORM
LUTHERAN HOSPITAL-LA CROSSE
LA CROSSE, WISCONSIN 54601

(FORM #220)

Imprint Patients Name Here

PATIENT NAME
CLINIC NUMBER

DATE AND TIME ORDERED - PLEASE WRITE MEDICATION ORDERS BETWEEN THE DASHED LINES

DEFINITE UNSTABLE ANGINA PROTOCOL
Phase II

DATE: _____

1. ~~Admit to CCU.~~
2. Admit to _____ Service.
3. Allergies: _____.
4. Code Status: _____.
5. Continuous EKG monitor with ST-segment monitoring.
6. ASA _____Yes Dose: _____ QD.
   _____No Why: _____ ASA Allergy
   _____ Abd/GI Bleed
   _____ Bleeding Diathesis
   _____ Hemorrhagic CVA
   _____ Active Ulcer
   _____ Previously Taken
   _____ Misc: _____
7. Heparin
   _____Protocol: Complete CCU/6W Heparin Order Sheet
   _____Other: _____
   _____No Why: _____ Heparin Reaction
   _____ Hemorrhagic CVA
   _____ Hx bleeding disorder
   _____ Platelets <= 100
   _____ Hemorrhage-admit day
   _____ Rectal bleeding
   _____ Current GI bleed
   _____ Misc: _____
8. Risk Assessment:
   a. Emergency Cardiac Cath. Complete and sign HC orders.
   b. Echocardiogram.
9. B Blocker: _____Yes Drug/Dose: _____
   _____No Why: _____ Heart Block
   _____ Cardiogenic shock
   _____ CHF on BB
   _____ SBP <100
   _____ ~~Brady w/atropine~~
   _____ Pulse <50
   _____ Misc: _____
10. Magnesium Sulfate. Bolus dose: _____
    Infusion: _____
11. NTG gtt. ____Yes Dose: _____
    ____No Why: _____ Shock/hypotension 1st 24hr
    _____ Misc: _____
12. Arrhythmia Protocol. Complete and sign attached orders.
13. Morphine Sulfate: 2 mg IV q 5 min. to max. of 10 mg. q 3 hrs. PRN or: _____
14. H2 Blocker: Drug/Dose _____.

continued.....

Under Authorization from the P & T Committee another generically equivalent drug (identical in form and content) may be substituted for the drug ordered. ☐

Figure 4

Gundersen Lutheran
1910 South Avenue, La Crosse, WI 54601

PATIENT NAME
CLINIC NUMBER

(FORM #219)

Imprint Patients Name Here

DATE AND TIME ORDERED - PLEASE WRITE MEDICATION ORDERS BETWEEN THE DASHED LINES

UNLIKELY UNSTABLE ANGINA PROTOCOL
Phase II (12-24 hours following entry into pathway)
DATE: _____

1. Admit to _____ Service.
   a. MD to assess patient upon arrival.
   b. If patient unstable refer to appropriate protocol.
2. Risk: Low_____ Medium___ High_ _____
3. Vital Signs: q.4 hours while aw and PRakeN.
4. Allergies: _____.
5. Code Status: _____.
6. Activity:
   a. Bedrest with BSC x _____ hours.
   b. Other: _____.
7. Continuous EKG monitor with ST-segment monitoring.
8. Notify MD of chest pain.
9. Instruct patient and family about symptoms and treatment of heart disease, and in a heart-healthy lifestyle per teaching practice guidelines.
10. Diet: a. NPO x _____ hours.
    b. Protocol: _____.
    c. Other: _____.
11. Medications:
    a. Continue NTG gtt.
    b. Continue Heparin gtt per Heparin Protocol.
    c. Aspirin 162 mg. PO QD.
    d. Beta blocker (if patient already taking med).
       Dose: _____.
    e. Morphine Sulfate 2 mg. IV q.5 minutes to max. of 10 mg. q.3 hours PRN.
    f. Tylenol 325-650 mg. PO q.4-6 hours PRN.
    g. AAOC PRN.
    h. LOC PRN.
    i. Sedation: _____.
    j. Sleep: _____.
    k. Arrhythmia Protocol (completed attached protocol).
    l. Other Medications:
       (1) _____.
       (2) _____.
       (3) _____.
       (4) _____.
12. Continue O2.
13. Continuous O2 Sats.
14. 12-Lead EKG:
    a. Upon arrival to CCU.
    b. In _____ hours.
    c. STAT with chest pain.
15. Chest x-ray (if not already done).
16. Labs: a. CPK in 6 hours; CK MB if CK elevated.
    b. Other: _____.

Revised: July, 1997

SIGNATURE: _____

Under Authorization from the P & T Committee another generically equivalent drug (identical in form and content) may be substituted for the drug ordered. ☐

Figure 5

management consulting firm to our institution to help us streamline our operations. We had collected data on our lengths-of-stay for various DRG categories, including many categories of chest pain and angina, prior to implementing the Pathway.

As part of our contract with this firm, we will have those data again collected periodically. In about a year from now, we will be able to demonstrate objectively how much the Pathway has reduced our length of stay for patients with chest pain, and what our rate of compliance is for adhering to the standards of care listed in the Pathway. Nonetheless, the most important advantage of the Pathway may lie in what cannot be truly measured: the heightened sense of teamwork and mission that already appear to be present to some degree and that we feel will only improve with time.

What we want to add to our Pathway in its next iteration is a module for education of the patient and his or her family. It is only logical that we teach patients and families to recognize the symptoms and signs of heart disease, to recognize the names of the common cardiac medications, to understand how these medications work and to know when a patient should seek medical care for a particular symptom. We have not emphasized this in the current version of the Pathway because of the time and effort it has taken to achieve consensus on the purely medical and operational facets of the Pathway. As the Pathway becomes more accepted and more familiar to all, education of the patient and the family is a logical step to add. We constantly invite suggestions from the users of the Pathway in an ongoing effort to improve it and to make it more relevant to its users.

WISCONSIN MEDICAL JOURNAL

Clinical Pathway for Total Knee Replacement

by Thomas Meyer, MD, Madison

The care pathway in use at St. Marys Hospital Medical Center, Madison, is designed to provide documentation of an interdisciplinary treatment plan that should, and does, apply to 80% of patients requiring total knee replacement and ensure that all the appropriate treatments, investigations and care are provided in a timely, organized and compassionate way.

Parts of the two key documents in the provision of the care are reproduced with permission of the hospital, orthopedic specialists and staff who developed and use the pathway to care for their patients. The two documents are:

1. The Patient Education Booklet which recognizes that an informed patient contributes in substantial part to his/her own recovery. The information is designed to allow the patient to:

a. plan ahead;

b. be constantly aware of what is going to happen and is happening to him/her at every step of the four-day hospitalization; and,

c. have a constant reference for what he/she should be doing in the post-hospitalization period.

The hope and experience is that this information decreases anxiety and increases cooperation.

2. The Interdisciplinary Flow-Sheet which is an 11-page document completed by all those involved on a progressive basis as each item in the protocol is achieved by the patient, nursing and physiotherapy staff, family services, and any others involved in the ongoing care.

Five pages are devoted to the "AM of Surgery," immediate "Post-op" care and "POD 1" (Post-op day) and six pages to PODs 2, 3 and 4.

There are many interesting features of the care pathways, several of which deserve comment.

1. The "OUTCOMES" section is expected patient outcomes e.g., "verbalizes understanding" at every stage, "10-feet ambulation in parallel bars" on POD 1, 15-feet on POD 2, 25-feet on POD 3.

2. The "ASSESSMENT/EVALUATIONS" include the patient's numerical rating (1 = least, 10 = worst) of pain along with the mechanism encouraging intervention and re-check if the pain is too intense, in addition to other post-operative items.

3. The "TREATMENTS/PROCEDURES" call for regular "cough and deep breathing" (C & DB) and deep vein thrombosis prophylaxis amongst a myriad of other items.

4. Regular teaching and emotional support throughout the hospitalization.

"TEACHING" a copy of the Patient Education Booklet and the protocol are available from Dawn Carlson, SMS Communications Assistant, at (800) 362-9080; (608) 257-6781, ext. 364, or via e-mail at DAWNC@smswi.org.

Thanks to Deb Geiger, St. Marys orthopedics head nurse.

GLOSSARY TO TOTAL KNEE REPLACEMENT CARE PATHWAY

PT	Physical Therapy	Y/N	Yes/No
PFS	Patient & Family Services	I & O	Intake and output
ID	Interdisciplinary	D/C	Discontinued
C & DB	Cough and deep breathing	MAR	Medical administration record
SMI	Sustained Maximum Inspiration	PCA	Patient controlled analgesia
ROM	Range of Motion	WBAT	Weight bearing as tolerated
JP	Jackson Pratt Drain	TTWB	Toe touch weight bearing
Rtg	Rating		

St. Marys Hospital Medical Center, Madison, Wisconsin

CARE PATHWAY ® Total Knee

KEY: →= Continues
Initials = Met
No Initials=Not Met
▲=Interdisciplinary Note Entry
•=Variance
X=Not Applicable

D=Day (0730 to 1530)
E=Evening (1530 to 2330)
N=Night (2330 to 0730)

CARE ITEM	CARE DAY Am of Surg	DATE 9/8/97			CARE DAY Post-op	DATE			CARE DAY POD 1	DATE 9-9-97		
		D	E	N		D	E	N		D	E	N
ASSESSMENTS/ EVALUATIONS CONTINUED					• Pt states his/her pain is: getting better, worse or stays the same. Days – Pms – Nocs				• Pt states his/her pain is: getting better, worse or stays the same. Days Better Pms Better Nocs			
TREATMENTS/ PROCEDURES	• Clip & pre-op scrub				• Time returned 2300 • Follow daily care protocols • SMI (5X/hr) 1000 ml minimal inspiration volume • C & DB, non-productive (If productive, sputum is clear). • Pumps per protocol. • IV as ordered Site LLA Date Placed 9/8/97 Needle size 20 Saline Lock Y/N Infusion Pumps Y/N Y/N Date D/C – • Catheter care per protocol. Urine remains amber to lt. yellow, clear, output > 200cc/8hrs. • Knee gatch on bed locked • I&O Q 8 hrs • JP as ordered • O2 as ordered • Autotransfusion per protocol				• Follow daily care protocols • SMI (5X/hr) 1000 ml minimal inspiration volume • C & DB, non-productive (If productive, sputum is clear). • Pumps per protocol. • IV as ordered Site LLA Date Placed 9/8/97 Needle size 16 \ 20 Saline Lock Y/N Infusion Pumps Y/N Date D/C – • Catheter care per protocol. Urine remains amber to lt. yellow, clear, output > 200cc/8hrs. • Knee gatch on bed locked • I&O Q 8 hrs • JP as ordered • D/C O2			

900-8 Rev. 6/97

Page 3

St. Marys Hospital Medical Center, Madison, Wisconsin
CARE PATHWAY ® Total Knee _____

KEY →= Continues
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D=Day (0730 to 1530)
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N=Night (2330 to 0730)

PATIENT LABEL

CARE ITEM	CARE DAY Am of Surg	DATE			CARE DAY Post-op	DATE			CARE DAY POD 1	DATE		
		D	E	N		D	E	N		D	E	N
ASSESSMENTS/ EVALUATIONS CONTINUED					• Respirations 10-20/min at rest, unlabored & regular, decrease in bases, clears with C & DB, SMI • Affected extremity is pink, warm & moveable within average ROM Capillary refill time < 3 seconds, peripheral pulses palpable • Sensation intact without numbness • Dressing dry (reinforce prn) • Routine post-op vs Pain description/location _____ Pt acceptable rating for this phase of care _____ 1 2 3 4 5 6 7 8 9 10 Time/Date | Present Rtg | Intervention | Time | Reeval Rtg Med/Other Med/Other Med/Other Med/Other Med/Other Med/Other Med/Other Other Intervention _____				• Affected extremity is pink, warm & moveable within average ROM. Capillary refill time < 3 seconds, peripheral pulses palpable • Sensation intact without numbness • Dressing dry (reinforce prn) • Routine post-op vs Pain description/location _____ Pt acceptable rating for this phase of care _____ 1 2 3 4 5 6 7 8 9 10 Time/Date | Present Rtg | Intervention | Time | Reeval Rtg Med/Other Med/Other Med/Other Med/Other Med/Other Med/Other Med/Other Other Intervention _____			

900-8 Rev 6/97

Page 2

St. Marys Hospital Medical Center, Madison, Wisconsin
CARE PATHWAY ® Total Knee _____

KEY →= Continues
Initials = Met
No Initials=Not Met
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PATIENT LABEL

CARE ITEM	CARE DAY Am of Surg	DATE			CARE DAY Post-op	DATE			CARE DAY POD 1	DATE		
		D	E	N		D	E	N		D	E	N
ASSESSMENTS/ EVALUATIONS CONTINUED					• Pt states his/her pain is: getting better, worse or stays the same Days _____ Pms _____ Nocs _____				• Pt states his/her pain is: getting better, worse or stays the same Days _____ Pms _____ Nocs _____			
TREATMENTS/ PROCEDURES	• Clip & pre-op scrub				• Time returned _____ • Follow daily care protocols • SMI (5X/hr) 1000 ml minimal inspiration volume • C & DB, non-productive (If productive, sputum is clear). • Pumps per protocol. • IV as ordered Site ______ Date Placed ______ Needle size ______ Saline Lock Y/N Y/N Infusion Pumps Y/N Y/N Date D/C ______ • Catheter care per protocol. Urine remains amber to lt. yellow, clear, output > 200cc/8hrs. • Knee gatch on bed locked • I&O Q 8 hrs • JP as ordered • O2 as ordered • Autotransfusion per protocol				• Follow daily care protocols • SMI (5X/hr) 1000 ml minimal inspiration volume • C & DB, non-productive (If productive, sputum is clear). • Pumps per protocol. • IV as ordered Site ______ Date Placed ______ Needle size ______ Saline Lock Y/N Y/N Infusion Pumps Y/N Y/N Date D/C ______ • Catheter care per protocol. Urine remains amber to lt. yellow, clear, output > 200cc/8hrs. • Knee gatch on bed locked • I&O Q 8 hrs • JP as ordered • D/C O2			

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Page 3

Patient Care Pathway

Total Knee Replacement

CARE PATHWAYS®

IMMEDIATELY AFTER SURGERY

ACTIVITY:

- Once you return to your room, your family may see you.
- You will be on bedrest after surgery.
- **Do not** rest your knee over a pillow. As gravity pulls your knee straight, you may feel a gentle stretch. This promotes flexibility in your knee.
- The nursing staff will be turning you to your side frequently to protect your skin.
- You will be asked to do ankle exercises every hour while awake. This can help reduce swelling and prevent blood clots. Point and then flex both feet slowly.

DIET:

- Your nurses will give you ice chips and then liquids as tolerated.

10

MEDICINE:

- It is normal to have pain after surgery. Pain medication will be available to you. You may have a PCA (Patient Controlled Analgesia) where you can press a button that will give you medicine through your I.V. when you feel pain.
- You will also receive Lovenox injections. This is an anti-blood clot medication. This shot will be given in your abdomen twice a day while you are in the hospital.
- You may receive fluids and antibiotics through your I.V.

TREATMENTS:

- Your nurse will be checking your blood pressure, pulse and temperature frequently.
- Your incision will be covered with a bandage.
- Drainage tubes may be used to remove excess drainage from your incision. (This is called a J.P.).
- During surgery, a catheter tube will be placed into your bladder which allows urine to drain into a bag. (This is called a foley catheter.)
- You will be on oxygen overnight.

11

THE SECOND DAY AFTER SURGERY

The goal for the rest of your hospital stay is to get you walking by exercising your knee muscles to regain strength and range of motion.

PEOPLE YOU WILL MEET:

- Patient and Family Services will continue to keep in touch with you and your family daily to help with discharge plans. They will help evaluate your ability to take care of yourself once you're home.

ACTIVITIES:

- You will be encouraged to sit in a chair as much as tolerated (at least three times a day).
- To help increase your knee's range of motion, sit at the edge of the bed with foot on a wash cloth and slowly move foot back and forth. Your nurse will assist you with this twice a day.
- You may start walking to the bathroom with help.
- Continue ankle and foot exercises.
- Take pain medication 30-60 minutes before each physical therapy session.
  - **Please bring family member/care giver with you to P.T.**

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WISCONSIN MEDICAL JOURNAL

Practice Guideline for Preoperative Testing (Healthy, Asymptomatic Patient Prior to Elective Surgery)

by Maynard D. Poland, MD, Milwaukee

This guideline is applicable to 50% of patients undergoing surgical procedures each year in the U.S. Of the $30 billion spent annually on preoperative testing, it is estimated that 60%, or $18 billion could be eliminated without sacrificing quality if tests are done selectively, as this guideline recommends. In fact, quality might improve because of the elimination of the blind alleys of additional testing and procedures done to clarify borderline tests that didn't have to be done in the first place. We estimate that application of this guideline by the attending staff at one of our hospitals for one year would eliminate between $600,000 and $1.2 million in testing charges compared to the base year of 1996.

The Summary of Tests on page 1 of the guideline is reproduced here. It recommends NO preoperative tests if the patient is a healthy, asymptomatic male under 40 or female under 50, undergoing elective surgery which is not expected to include significant blood loss, a pregnancy test is needed when appropriate. The guideline includes three pages of annotation and comment on the recommendations, a listing of the work group members and their credentials and a bibliography. In addition, there is an explanation of guideline background, use, and development. Included are statements which emphasize that the guideline is not a mandate, but rather is meant to assist the physician by providing a framework for the evaluation and treatment of patients. Clearly, the provider responsible for the care of the patient must be the final judge of the applicability of the details of the guideline to the individual patient, but should have objective reasons if the guideline is not followed.

Please direct questions about the guidelines program, or requests for a reprint of this guideline to Cathleen Batzner, RN, BSN, Manager, Health Care Guidelines, 414-257-3888, FAX 414-257-3433. Address: Horizon Healthcare, Inc., 2300 North Mayfair Road, Suite 550, Milwaukee, WI 53226.

Having learned how to produce physician practice guidelines, we are establishing a process to effectively implement them to ensure full utilization. Implementation efforts include large group CME (Grand Rounds and Hospital Staff meetings), small group CME (departmental and practice group meetings), and individual detailing to both physicians and office staff. In addition, certain hospital functions and personnel (Ambulatory Surgery, etc.) are included in the implementation process. We are beginning outcomes measurement to assess the utilization and effectiveness of the guidelines.

Our guidelines program is led by a 23-member committee, consisting of representatives of each of the major practice groups who attend at Horizon hospitals, and representatives of the major insurers in the Milwaukee metropolitan area. The work groups producing the guidelines are also made up of physicians representing as many of the practice groups as possible, but do not include insurers, and are limited to 7- to 10-members. This particular guideline was "run past" the Chiefs of Surgery and Anesthesia at each of the Horizon hospitals and an Ambulatory Surgery Center for approval.

Preoperative Testing

Healthy, Asymptomatic Patient Prior to Elective Surgery
May 1996

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Summary of Tests

Superscripts refer to Annotation and Comment on pages 3-5.
The entire document should be reviewed and understood prior to use.

TESTS RECOMMENDED

Hemoglobin/Hematocrit[1]

Qualifier: If significant perioperative blood loss is expected (requiring transfusion or adversely affecting hemodynamics).

Electrocardiogram[2]

Qualifier: Men 40 or older, Women 50 or older.

Pregnancy Test[3]

Qualifier: Within one week prior to surgery if at risk.

Prior Tests[4]

Qualifier: May be used if performed within three months before surgery, provided the previous result was normal and neither the patient's condition nor medications have changed.

TESTS NOT RECOMMENDED

The following tests are not recommended without specific clinical indication present to justify further testing:*

Chest X-Ray[5]
Tests of Coagulation[6]
White Blood Cell Count[7]
Urinalysis[8]
Glucose[9]
Electrolytes[10]
Renal Function[11]
Liver Function Tests[12]

TEST WITH NO CONSENSUS

HIV[13]

* Clinical indication means indication other than surgery in the healthy asymptomatic patient.

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Milwaukee, Wisconsin 53226
414-257-3888, Fax 414-257-3433

GUIDELINE BACKGROUND, USE & DEVELOPMENT

Guideline Background

There are over 20 million surgical procedures annually in the U.S., with an overall mortality rate of 2%. Of all patients undergoing surgery each year, 50% are considered to be American Society of Anesthesiology physical class I (no disease other than the surgical condition, no systemic disturbance), with a significantly lower mortality rate at 0.06%. It has been estimated that preoperative testing and evaluation costs more than $30 billion annually, of which 60%, or $18 billion could be saved if tests were done selectively. Since half of all surgeries are done on healthy, asymptomatic patients in whom the risk of perioperative complications is very low, it is likely that a significant proportion of this unnecessary testing is occurring in this group. Therefore, selection of only appropriate preoperative tests for these patients prior to elective surgery can produce significant cost savings without adversely impacting quality of care. The purpose of this guideline is to assist physicians in choosing appropriate preoperative tests for the *healthy, asymptomatic patient* prior to elective surgery which poses risk sufficient to justify the tests.

Guideline Use

It should be emphasized that this guideline is for preoperative testing of healthy, asymptomatic patients, and is not a tool for disease screening, case finding, or health maintenance. Detection of significant abnormalities in the healthy, asymptomatic patient is too low to justify routine pre-op testing beyond the recommendations of this guideline, ***without clinical indication*** other than the surgery, itself. ***Exceptions*** may occur in the setting of emergency surgery where test abnormalities may be more likely, or when an adequate preoperative evaluation cannot be performed and additional information may be needed to appropriately assess perioperative risk. In any setting, further tests may be necessary, based on the findings of the preoperative evaluation, pre-existing medical conditions, medications, or the type of surgery performed. *An appropriate preoperative health status evaluation is a prerequisite to this guideline;* the decision of doing a complete history and physical or updating a recent H & P *if the interval condition and medication of the patient has not changed* is up to the judgment of the physician(s).

This guideline is not a mandate; its purpose is to assist the physician by providing a framework for the evaluation and treatment of patients. It is not to be used as a substitute for the clinician's professional judgment based on assessment of the patient's status and needs, nor is it meant to establish a protocol for all patients. The provider responsible for the care of the patient must be the final judge of the applicability of the details of the guideline to the individual patient, noting how the patient's presentation and needs correspond to or differ from the various aspects of this guideline. Thus, departure from this guideline by a clinician familiar with a patient's individual presentation and circumstances may be appropriate and should not automatically be interpreted as compromising care. Decisions about ordering a particular preoperative test are by the clinical judgment of the physician performing the preoperative evaluation. It is imperative, however, that each test ordered outside the parameters of this guideline have a *documented* clinical indication. Terms such as "routine" or unselected screening are no longer appropriate, and cannot be used to justify preoperative tests.

Development

The physician work group which developed this guideline reviewed the related documents already in place at Horizon hospitals and associated clinics and groups, and also reviewed literature sources, including original studies, review articles, and textbooks. Evidence-based recommendations were then developed from this information. Where there was insufficient data to make an evidence-based recommendation, recommendations were based on expert opinion in the literature and/or clinical prudence, and agreed upon by the multidisciplinary work group.

The work group that formulated this guideline is dedicated to collection of your comments and suggestions, reviewing new information, and updating and improving this document no less than annually. Please contact the Chairman or any member of the work group about your comments so they may be considered for review and revision of this guideline; their names, telephone numbers and credentials are on page 6. If you have difficulty making contact or have other questions or suggestions, please call Cathleen Batzner, R.N., B.S.N., Manager, Health Care Guidelines, at the Horizon Office, 257-3888.

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Tests *Not* Recommended

Tests Not Recommended for Healthy, Asymptomatic Patient Prior to Elective Surgery.

5. CHEST X-RAY (CXR)

Although the most widely studied of the preoperative tests, the CXR remains the most controversial. Studies have demonstrated a high frequency of unanticipated abnormalities on preoperative CXR's as age advances. For that reason, many experts recommend a preoperative CXR in all patients over the age of 60. However, as of now there is no study which demonstrates that a CXR in these situations changes perioperative management decisions and/or surgical outcome. *Therefore, it is recommended that a CXR be performed only when clinical indication* exits.*

6. TESTS OF COAGULATION (PT, PTT, Bleeding Time & Platelets)

Abnormalities of these tests are uncommon in patients who have no clinical suspicion of a bleeding diathesis. Even when abnormalities are found in the asymptomatic patient, the correlation with significant postoperative events is poor. The best screening tool remains the preoperative history and physical exam. *Routine preoperative use of tests of coagulation without clinical indication* is not* recommended.

7. WHITE BLOOD CELL COUNT (WBC)

Severe abnormalities of the WBC are probably associated with an increased surgical morbidity but supporting data is lacking. None-the-less, the frequency of severe leukocytosis and leukopenia in asymptomatic patients is low. *Therefore, WBC determinations in patients without clinical indication* of abnormality are unnecessary.*

8. URINALYSIS (UA)

Past rationale for a routine preoperative urinalysis was for the detection of unsuspected renal disease or asymptomatic urinary tract infection; however, *the creatinine has been shown to be a more sensitive test for renal disease* (see #11, next page). Studies linking urinary tract infections to postoperative wound infection are methodologically weak and unreliable. *Therefore, a routine UA is not recommended before elective surgery unless a foreign body (hardware, valve, etc.) will be implanted, and occult UTI should be excluded to detect a potential focus for infection;* although the risk of seeding the prosthesis is small, the potential catastrophic outcome warrants screening *in this selected setting.*

9. GLUCOSE

The frequency of asymptomatic hyperglycemia in non-diabetic patients ranges from 1.8 to 5.5%. Also, studies have demonstrated that mild hyperglycemia in asymptomatic diabetics is *not* a risk factor for perioperative complications. Any increase in the glucose which could affect surgical outcome will be detected by the preoperative history and physical exam. *Therefore, unselected screening for hyperglycemia is not indicated prior to elective surgery.*

10. ELECTROLYTES (Na, K, Cl, C02)

Unanticipated abnormalities of electrolytes are rare, occurring in less than 1% of patients prior to elective surgery. In addition, the relationship of most electrolyte disorders to perioperative complications is poor. *Therefore, electrolyte determinations without clinical indication* are unnecessary prior to elective surgery.* A potassium determination is indicated for any patient taking a diuretic, or in a setting where knowledge of the K+ is important (i.e., patient treated with digoxin).

**Clinical indication means indication other than surgery in the healthy asymptomatic patient*

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Tests Recommended

Annotation & Comment

1. HEMATOCRIT/HEMOGLOBIN (H/H)

Abnormalities of the H/H are common (10%), but severe abnormalities not detected by the history and physical exam, and that affect surgical risk are not common (<1%). What is known is that abnormalities of the H/H are common after major surgery and may necessitate transfusion. Therefore, although unproved, *a baseline H/H is recommended for all patients undergoing surgical procedures where significant, transfusable blood loss is anticipated.*

2. ELECTROCARDIOGRAM (ECG)

Investigations of preoperative ECG's have found abnormalities to occur in 14-53% of surgical populations. These abnormalities become more frequent and significant with advancing age, but the relationship between nonspecific abnormalities such ST-segment and T wave changes and perioperative complications is poor. Recent silent myocardial infarction is well known to increase perioperative surgical morbidity and mortality, but estimates have found this finding to be rare on preoperative ECG's, occurring in only 0.3% of *elderly* males. The frequency of important arrythmias found on the preoperative ECG in patients who have a normal preoperative cardiac history and physical exam is unknown. Also, the value of a baseline ECG has not been adequately studied. *Nonetheless, because ECG abnormalities are common and have greater significance as age increases, it is recommended that an ECG be performed on all males over the age of 40 and females over the age of 50 prior to elective surgery.*

3. PREGNANCY TEST

Due to fetal risk from potential exposure to anesthetic medications, other teratogenic drugs, or irradiation from x-rays, *it is recommended to test any woman at risk for pregnancy within one week prior to elective surgery.*

4. PREVIOUS TESTS

Studies show a very low incidence of abnormalities of tests which were repeats of normal tests done in the year prior to surgery; exceptions are those tests done as a *result of indications from the preoperative evaluation. Thus, current conservative consensus recommends utilization of previous tests if they are less than three months old, are normal, and the patient's interval condition or medications have not changed.*

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PREOPERATIVE TESTING

11. RENAL FUNCTION (BUN and Creatinine)

The frequency of finding renal abnormalities is low in the asymptomatic patient when testing is done without clinical indication. However, because asymptomatic renal disease becomes more prevalent with advancing age and may have a significant impact on surgical morbidity and mortality, some experts recommend a creatinine in all patients over the age of 40. Unfortunately, literature is lacking to support that association. *Therefore, tests of renal function are not routinely recommended, and are left to the discretion of the ordering physician.*

12. LIVER FUNCTION TESTS (LFTs)

The incidence of asymptomatic elevations of the SGOT has been demonstrated to be low (0.5%), and mild increases in transaminase have been shown to have very little or no impact on surgical morbidity. Severe viral or alcoholic hepatitis clearly does increase perioperative risk, but these disorders are rarely present without clinical findings, and should be identified by the history and physical exam. *Therefore, unselected screening of LFTs prior to elective surgery is not indicated.*

Test With *No* Consensus

13. HIV

Due to a lack of sufficient data, there is currently *no consensus opinion on preoperative HIV screening.*

See second paragraph, page 2 for sentence on ***Exceptions***: settings or situations when selection of the foregoing tests *may be indicated* for routine testing of healthy, asymptomatic patients.

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WISCONSIN MEDICAL JOURNAL

Psychiatry Pathway: Physicians Make the Process Work and Find Benefits for Themselves

by Robert D. Lerner, MD, Milwaukee

I have worked with pathway development and implementation for five years. I find pathways to be very helpful in improving mental health care to patients. The benefits are particularly important for patients with complicated medical, psychiatric, social, and family problems. They get consistent, effective, quality of care. Health care providers have a clearer sense of the value of their work and receive a benefit from the process, as well. Pathway development, when conducted in an integrated interdisciplinary approach, actually allows physicians to have increased medical leadership and substantial influence in the way health care is provided to patients.

Physicians are often resistant and reluctant to participate in the process. They express a variety of concerns. These include complaints that practicing from pathways is "cookbook medicine," that pathways remove the physician's ability to exert the full range of his/her professional and practice skills, that the pathway imposes and restricts the physician, and that it creates still an additional standard of care with possible legal or malpractice implications.

I am very sensitive to these concerns expressed by physicians, but I have found that physicians actually enjoy the process and make important contributions to the final the pathway document. They receive a great deal of satisfaction in finding themselves participating in improvement of patient care. They also often find themselves in better practice relationships with non-physician practitioners who are pleased to have physicians participate with them in the process.

Practice guidelines, best practice standards, algorithms, and clinical pathways can represent a part of a successful strategy in maintaining the importance of the physician's role in the care of patients in the environment of managed care. The "trick" is for us to stay involved with the team and to insist on the inclusion of both our clinical knowledge and our practice values.

Dr. Lerner is director of Geriatric Psychiatry at Sinai Samaritan Medical Center in Milwaukee. He has been developing clinical pathways for depression in the elderly and for disturbed behavior in cognitively impaired elders. The Geriatric Depression pathway resulted in a paper published in the *Journal of Nursing Administration*. Dr. Lerner may be reached at: Robert D. Lerner,MD, Director of Geriatric Psychiatry, Sinai Samaritan Medical Center, Milwaukee, WI 53201-0342; phone: (414) 937-5488 or e-mail: agingbab@earthlink.net.

Admission date _____ Time _____ MMSE Score _____

	24 Hours	48	72	4 & 5 Days	6 & 7	8
ASSESSMENTS	Nsg data base ___ MMSE ___ Psych notified ___ ___PMO notified ___ Psych initial note ___ PAS initial score ___ Voluntary consent ___ Conpetency Status Incompetent ___ Questionable ___ Adv. Dir. ___ Release of Information ___	GDS ___ Skin Assess ___ Dietary Consult ___	Psychosocial Assessment ___ Psych Rehab Initial Assessment ___ DSM-IV Multiaxial DX estab. ___ Toileting/Incont. reassessment ___	Repeat PAS ___ (score) ___ Consider KELS ___ Allen ___ Additional Assess. _____ _____ _____ _____ _____	Day 7 PAS ___ (score) ___ Additional Assess. ___	Med/psych status stable & optimal ___
TESTS/LABS	SSMC records for previous test results ___ Chem 6, Chem 12 ___ CBC/diff ___ Folate/B12 ___ TSH/T_3, T_4, T_7 ___ RPR ___ Hep A/Hep B/.HIV ___UA, UDS, C&S ___ EKG/EEG ___ CT Scan ___ Serum Drug Levels _____ _____ Lab tests reviewed ___	Additional Tests/labs	Consider neuro Psych. Testing ___ Additional Tests/Labs	Additional Tests/labs	Additional Tests/labs	All tests/labs completed ___

	24 Hours	48 ·	72	4 & 5 Days	6 & 7	8
BEHAVIOR/TX	ID behaviors that led to admission ___ Develop initial tx. plan to respond to behaviors ___ At risk for fall protocol implemented ___	Interdisciplinary Tx. team meeting conducted ___ Review Tx. plan and estab. appro/additional goals/ DX/s ___	Interdisciplinary TX. team meeting conducted ___ Develop initial behavioral plan ___	Discuss behavior plan with family provider ___	Conduct meeting with pt./family providers ___ present assess. results ___	DC plans/recommenda- tions given to patient, families & caregivers ___ Copy of behavior plan sent ___ Copy of pertinent assessments sent ___
MEDS	Consent for med. administration ___ Nursing Documents meds/dose ___ Communicates with PMD & psychiatrist re: med needs ___ MD orderinitial psychotropics ___	Review response to current meds ___	Review response to current meds ___	Review response to current meds ___	Discuss current med. regime with patient, family, & providers ___	Road map completed ___ Prescriptions given 'to patient, family, & provider ___ Current medication listed on DC summary PPOC ___
CONSULTS	PMD H & P within 24° ___	Additional Consults	Consider neurology consult ___ Additional Consults	Additional Consults	Additional Consults	Follow-up established with recommendations ___
TEACHING	Orient patient/family to unit/program Teach Patient, family, & providers about usual course of treatment ___		Provide information as needed ___ re: dementia Use of Pathway ___		Provide written information on current medications ___	Review/instruct re: DC meds ___ Patient, family, & provider

	24 Hours	48	72	4 & 5 Days	6 & 7	8
D/C PLANNING	Current Residence Determined ___	Identify D/C planning needs & concerns ___ Providers services utilized ___ Family & providers perception of adequacy of support ___	Initial discussion by staff of DC plan ___ Provide family with update ___	Provide family with update ___	Contact with afterare providers ___ At fam,ily meeting discuss status of DC plan & after care ___	Documents prepared by all disciplines ___ All appointments are documented & communicated to patient, family, & providers ___
OUTCOMES	Determine patients perception of why they are hospitalized ___ Safe environment established ___ Baseline medical status determined ___ Plan of care reflects patients goals and needs ___		LTG's established ___	Environmental adaptation/assistive devices provided as needed ___ Guardianship needs determined & options presented ___	Discharge plan is established	Perceptoin of DC plan: Patient ___ Family ___ Staff ___ DC/Aftercare plan acknowledged by patient, family & providers and proces implemented ___ Satisfaction survey completed by patient and family ___

Date	Day 1	Day 2
Psychiatry	• Complete initial assessment • Assess for advance directives • Obtain consents • Sign up for treatment planning conference and family meeting • Request medical consultation • Address discharge needs • Complete certificate/petition if needed • Identify preliminary expected outcomes for inpatient treatment	• Finalize medication plan • Review laboratory results • Contact internist for abnormal laboratory values • Monitor medication side effects
Nursing	• Complete initial assessment • Indicate precautions as needed • Initiate schedule, e.g., toileting, exercise, time out of room • Determine group and activity schedule • Complete initial care plan • Review pathway and expected outcomes with patient and/or significant key other	• Begin medication teaching with patient and/or significant key other • Complete mini mental status examination • Complete Geriatric Depression Scale • Determine schedule for weighing patient 2–3 times per week • Assist with ADL as needed while fostering independence • Complete a sleep assessment
Social Work	• Begin assessment • Contact family and/or referral source to collaborate regarding key issues	• Complete assessment with input from family and/ or referral source • Identify family member's own stressors and understanding of patient's illness • Assess supports already in place • Set collaborative goal with patient and significant key other
Occupational Therapy	• Begin assessment • Involve patient in one activity (group or individual)	• Determine appropriate set of OT groups (e.g., skills vs. leisure exploration)
Tests, Procedures, Consultations	• Complete history and physical • Contact medical internist • Order orthostatic blood pressure monitoring • Consider chest X-ray • Order SMA-20 • Order B^{12} and folate • Order complete blood count and urinalysis • Order thyroid profile • Order electrocardiogram	• Consider the following consultations and order as needed: Physical therapy Psychological, neuropsychological testing Audiology Ophthalmology Dental Chaplain Internal medicine
Patient Outcomes	• Does not harm self • Attends scheduled milieu groups and activities • Demonstrates readiness to learn • Demonstrates no barriers to learning • Verbalizes understanding of pathway	• Does not harm self • Attends scheduled milieu groups and activities • Demonstrates readiness to learn • Demonstrates no barriers to learning • Verbalizes understanding of illness and treatment
Significant Key Other Outcomes	• Voices goals and expectations for treatment	• Speaks with social worker to provide information

Opportunity to Improve Diabetes Care

Joseph N. Blustein, MD; Kristine M. Miesbauer, RN; and Jay A. Gold, MD, JD, MPH

MetaStar is recruiting clinics for a quality improvement project intended to reduce blindness and lower limb amputations in diabetic patients.

Diabetes, of course, is a very common disease.[1] The overall prevalence rate is greater than 3% in the U.S. population. Non-insulin-dependent diabetes makes up more than 90% of the approximate eight million diagnosed cases of diabetes in the U.S. The prevalence of diagnosed diabetes increases with age and is present in over 10% of the Medicare (> 64 years of age) population. In Wisconsin, there are approximately 50,000 Medicare beneficiaries with diabetes.

MetaStar's quality improvement project focuses on three indicators in the management of diabetic patients: annual dilated eye exam, yearly office foot exam and glycosylated hemoglobin measurement. These indicators are supported by the guidelines of the American Diabetes Association and the Wisconsin Diabetes Control Program, and reflect the published evidence and expert opinion on what constitutes quality diabetes care. Experts agree that regular use of preventive and monitoring services are both cost-effective and helpful in minimizing the complications of diabetes.

In a pilot project with a large medical group, MetaStar previously reported that only 30% of Medicare diabetics had received an annual dilated eye exam, 47% had not received a foot exam during the one-year period, 22% did not have any blood test for glycosylated hemoglobin and another 21% had only a single test (Figure 1).[2] These results were shared with the medical group who implemented action plans designed to improve on the care for their diabetic patients. Follow-up results for this pilot will be published in this column when available.

On a national level, a recent report indicated that only 42% of diabetic Medicare beneficiaries in the fee-for-service arena had received an eye exam in 1994[3] and only 21% had a glycosylated hemoglobin test. These results were based on Medicare billing claims. The rate for foot exams, required chart abstraction and based upon a sample from three states was only 44% over 18 months (1/1/94-6/30/95).[4] In the HMO setting, things do not appear to be much different: the average annual diabetic eye exam rate reported by HMOs participating in the Health Plan Employer Data and Information Set (HEDIS) was 42% in 1995.[3]

Collaboration in MetaStar's Diabetes QI project is offered to all health care providers in Wisconsin at no charge. All participants will receive a Quality Kit, as well as updates and reports. The Quality Kit contains materials designed to improve management and decrease complications for diabetic patients. Statistical support, such as sample size calculation and data reliability, is available from MetaStar. Tools and strategies for implementing an action plan are included in the quality kit. Each clinic will submit their data to MetaStar for analysis. An individualized report will be sent to each clinic, including comparative data, and can be used in developing improvement efforts.

Enrollment in this project, Diabetes: Eye, Foot & Blood Exams, will be offered only through November of this year. If you are interested in finding out more about this opportunity contact Kris Miesbauer, RN, Project Coordinator, at MetaStar -- phone: (800) 362-2320 or (608) 274-1940, Fax: (608) 274-5008, or e-mail: wipro.kmiesbau@sdps.org.

Notes

1. Diabetes in America - 2nd Edition. NIH Publication No. 95-1468. Na-tional Institute of Diabetes and Kid-ney Diseases. Bethesda, MD, 1995.
2. Blustein, JN, Gold, JA, Miesbauer, KM, and Halvorsen, CL. Diabetic Retinopathy Project. *Wisconsin Medical Journal*. Jan 97; 60-1.
3. Most Beneficiaries with Diabetes do not Receive Recommended Monitoring Services. Medicare GAO Report. March 1997.
4. Improving Care for Medicare Beneficiaries with Diabetes Mellitus. US DHSS, HCFA. August 1997.

Fig. 1. MetaStar Diabetes Pilot Project. Annual % (1995) n = 135
GHb = glycosylated hemoglobin

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Malpractice Liability and Managed Care

Edited by Kalissa Barratt, JD

The managed care arena presents a heightened risk of liability for a number of reasons. This article discusses these increased risks and suggests strategies for reducing them.[1]

In performing professional services for a patient, a physician has the legal duty to exercise that degree of care, skill and judgment which is usually exercised in the same or similar circumstances by the reasonable physician practicing in the same specialty, have due regard for the state of medical science at the time of treatment. In meeting the requisite standard of care, as well as other requirements in the law, the physician has further duties, including but not limited to:

- the duty to keep and maintain adequate medical records;
- the duty to refer to specialists when appropriate; and,
- the duty to obtain the patient's informed consent, including informing the patient of the availability and the benefits and risks of all alternate, viable medical modes of treatment.[2]

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As discussed below, these rules do not change in the managed care environment.

UTILIZATION REVIEW

Review U.R. Procedures

Physicians are well-advised to carefully review the standards and appeal process by which utilization and quality will be reviewed, since physicians who blindly accept third-party decisions may nonetheless be liable for the consequences. The managed care organization or health plan (the "plan") may also be sued, but this may be of little comfort or help to the physician also held liable. It is important to determine whether qualified physicians are part of the plan's utilization review and quality assurance functions.

Physician Liability for Bad U.R. Decision

Both physicians and plans may be sued and found liable if a U.R. decision results in a bad outcome.[3] To mitigate or absolve the physician from liability, some cases hold that if the plan makes a decision not to pay for or authorize necessary services, the physician is obligated to take reasonable steps to protest (appeal the decision) on behalf of the enrollee. Although neither *Wickline* nor *Wilson* were Wisconsin cases, their logic and reasoning may be considered by Wisconsin courts faced with similar issues.

In light of this case law, it is absolutely crucial that physicians document in the record: all of the information regarding any request for services or procedures any appeal made to a plan reviewer regarding patient care; and possibly most important, the advice given to the patient in light of the reviewer's response and the patient's subsequent decision.

Physicians who advocate for medically appropriate health care for their patients may face retaliation by managed care plans in the form of being deselected or terminated by the plan. Some state laws[4] give physicians a right to recover damages if a health plan (or medical group, IPA, PPO, Foundation, hospital medical staff and governing body or payor) terminates an employment or other contractual relationship or otherwise penalizes a physician in retaliation against the physician's efforts to challenge decisions, policies or practices which impair the physician's ability to provide medically appropriate health care to his or her patients. Such provisions may declare that it is against public policy for a plan to terminate or otherwise retaliate against a physician because he/she protested an adverse U.R. decision or otherwise advocated for quality patient care. In other states, the courts have decided that there is a

cause of action against an HMO that uses a "without cause" termination provision in a physician provider contract to mask a termination actually made in bad faith, or for reasons contrary to public policy. *Harper v. Healthsource, NH, Inc.* 674 A.2d 962 (1996).

As a matter of practice, all potentially relevant written communications from the plan should be kept so that, if necessary, the physician can prove that a termination (or other inappropriate retaliatory activity) in violation of the law has occurred. Also, oral communications should be documented. For example, if the plan terminates the physician allegedly because the physician is an "overutilizer," and the physician knows that he or she is being terminated for appealing an adverse U.R. decision, it will help the physician's case if he or she can show prior reports generated from the plan which show that the physician is not, relatively speaking, an overutilizer.

Case Study. In a recent California case, a physician was held liable for damages suffered by a patient as a result of a delay in authorization. Since the case was resolved at the trial level and it is not a reported decision, it is not legal precedent. However, it is important to illustrate what can happen even when it appears the physician has done everything right.

The plaintiff was a 20-year-old man with a severely disabled leg. The orthopedist was the defendant. When the plaintiff was 13, he was referred to the orthopedist with hip pain. The orthopedist did not regard the condition as an emergency. The HMO to which the plaintiff belonged required pre-authorization for all surgeries. The doctor told the patient's mother he would write the HMO that day requesting authorization for surgery and would give her the date for surgery once he obtained it. He then sent the patient home on crutches and admonished him not to put any weight on his leg. One week later, at school, the plaintiff slipped and fell causing severe injury to his hip. The patient was immediately hospitalized. After several surgeries and numerous complications, the patient was sent home in a body cast.

At trial, the defendant physician maintained that it was not unreasonable to delay the surgery until authorization was obtained by the HMO. The doctor felt he had no other choice. The plaintiff argued that the medical condition required urgent treatment and that he should have been hospitalized immediately. Alternatively, if the HMO refused to authorize admittance at that time, the physician should have referred the boy to another non-contracting hospital. In essence, the plaintiff argued that it was the doctor's obligation to do whatever was necessary within the short time period.

In October 1993, the jury awarded the patient $750,000. Key to the jury was the allegation that the doctor did not emphasize the urgency of the case in his letter to the HMO, nor did he follow up when the HMO did not respond with a few days. (*Pena v. Rouhe* #243832, San Bernardino Sup. Ct., Oct. 14, 1993.) The award was reduced to $400,000 pursuant to California law.

What this type of case demonstrates is that it is not enough in the managed care arena to prescribe treatment that you deem to be necessary. **If the treatment is denied by a managed care organization, you must: vigorously protest; become an advocate for your patient; inform the patient of the necessity of treatment; and, document all discussions.**

Patients May Be Unable to Recover from Plan. Although both physicians and plans may be sued and found liable if an enrollee does not receive proper treatment, in reality the ability of an enrollee to recover against an ERISA plan may be limited. "ERISA" stands for the Employee Retirement Income Security Act. It is the federal law which governs employee benefit plans. In *Spain v. Aetna Life Insurance Company*, 11 F.3d 129 (9th Cir. 1993), the court held that if an ERISA plan's denial of benefits results in patient harm, the plaintiff may recover from the plan only the benefits he/she would have been entitled to under the plan. This holding has been followed in other Courts. When patients are wronged by an ERISA plan's benefit decision, there will generally be two parties to sue, the physician and the plan. Since patients will not be able to fully recover damages from the plan, the practical effect of this decision may be that patients will focus on the physician. Therefore, it is imperative that physicians appeal any plan decision not to authorize treatment which the physician considers medically necessary. Unless the physicians exercise such appeal rights, they may end up being the sole "deep pocket" in the event of a lawsuit. See also *Jazz v. Prudential Health Care Plan*, F.3d, 1996 WL 379789 (7th Cir. Ill.).

What to Do When Necessary Care Is Denied. If a physician's recommendation as to necessary medical care is not approved by the plan, the following steps may be taken by the physician in order to secure appropriate care for the patient and to fulfill the physician's legal obligation.

1. Inform the patient that the plan has refused to authorize recommended treatment, and that the patient may be responsible for payment if the plan continues its failure to authorize. Tell the patient of your intention to challenge the plan's decision. **Inform the patient of the reasons supporting the recommended tests, procedures and/or treatments and the potential risks of foregoing such medical**

care. Document the discussion in the chart.

2. Challenge the plan's decision. Contracts should, but often do not, spell out appeal procedures for denial of recommended tests, procedures and/or treatment. By using physician grievance procedures, the physician should persuade plan principals of the validity of his/her opinion. There may be an appeal mechanism for the patient to follow as well, and the physician should assist with this. Exhaust such procedures (or discussions), and document your efforts in the medical record and in letters to the plan.

3. If the plan does not change the decision, provide the service as a non-covered service for which the patient may pay your usual (or an agreed upon) fee or assist the patient in seeking care from other sources. However, check your contract as it may prohibit you from billing patients for services deemed not medically necessary, "experimental," or "investigational."

Amendment of U.R. Procedures

Some contracts allow the plan to amend the utilization review procedures "from time to time." Such language could allow the plan to change the procedures in a way which adversely affects the physician contract. If the plan will not agree to deletion of this type of provision, then the physician should at least be given a 30 day notice of any change to the utilization review procedures. That way, if the physician objects to the procedures he/she may inform the plan of the problem and/or terminate the contract.

Primary Entry Point Physician Responsibilities

Physicians need to recognize and provide for any expanded responsibilities for "managing" the patient's care assumed by virtue of the language in their managed care contracts. A 1995 New Jersey case, *Dunn v. Praiss* 656 A.2d 413, illustrates the potential problems.

Dunn experienced swelling and pain in his scrotal area. His health plan's ("HCP") description of benefits said that a member's primary care physician "becomes the member's personal physician and assumes responsibility for coordinating the members total health program." Indeed, many plan documents read this way.

Dunn's primary care physician (PCP), diagnosed epididymitis. She referred Dunn to a physician associated with of South Jersey Urologic Associates (SJUA), a urology group that also contracted with HCP. That physician diagnosed an atrophic testicle with persistent hydrocele and a possible hernia. He sent Dunn for a scrotal scan, which showed some type of mass, but did not determine its composition. He ordered no further tests to determine if the mass was cancerous, but scheduled a return appointment. About a week later, another urology group physician examined Dunn and told him to note any change in the size of the mass through self-examination. That physician ordered no further tests and scheduled no return appointments. **Neither the scrotal exam results nor the group physicians' evaluations reached the PCP who had no further contact with Dunn.**

About ten months later, oncological tests disclosed testicular cancer that had spread to the liver. Shortly after extensive chemotherapy, Dunn died. His widow sued the individual physicians and the plan for medical malpractice. (Although the plaintiff did not allege that HCP committed malpractice, it was sued as a principal who is responsible for its agents' (the doctors') alleged malpractice.) **The plaintiff also sued the plan for breach of contract (i.e., the health plan's description of benefits, quoted above) based on the PCP's failure to review and follow up the urologists' reports.**

Physicians Seek Contribution from Plan

When the trial was over, the group wanted the plan to share in the liability because, as the plaintiff said, it breached its promises in its plan documents. The issue before the New Jersey high court was whether there can be monetary contribution to physicians liable for malpractice, from an HMO, whose breach of contract is also a cause of the patient's injury. The court found that a medical group is permitted to seek contribution from an HMO when the latter breaches its promises to the enrollee, and that breach causes harm. The court stated that an HMO's breach of a contractual duty which is the cause of a patient's injury can be balanced against the negligence of another party (the physicians) so that each party will be liable for a percentage of the judgment. However, the court ultimately ruled against the group on the ground that they did not assert their claim for contribution in a timely fashion.

What Physicians Can Learn from Primary Entry Point Cases

1. Although the *Dunn* case was ultimately dropped against the PCP, future primary care physicians may not be so lucky. **Primary entry point physicians should monitor referrals to specialists, as they may be sued for malpractice if the specialists do not appropriately follow up.**

2. Physicians sued for malpractice may wish to evaluate whether the plan may be liable

also for breach of contract if statements in plan documents are not adhered to. It must be emphasized, however, that a decision to "cross-claim" against the plan raises numerous tactical and legal issues which the physician and his or her attorney will need to consider.

FINANCIAL INCENTIVES

An allegation which may arise in a medical negligence action is that the physician failed to refer or to perform necessary services due to financial incentives. This is an area which requires the physician to have a heightened awareness of liability issues.

Incentive Not to Refer

Managed care physicians may have a financial incentive not to refer cases to (sub)specialists. Malpractice liability risk increases where a physician tries to treat a condition beyond his or her competence. Necessary tests or treatment may not be performed. If something goes wrong, delay in referring the patient to a (sub)specialist (and, therefore delay in treatment) could also result in a malpractice suit. Depending on the circumstances, the standard of care applicable to specialists or subspecialists may be applied, even though the care was provided by a primary care physician. A plaintiff's attorney will focus on anything that can compromise objectivity, including a financial incentive not to refer.

For example, a Ventura County California Superior Court jury ruled that the husband and son of a patient should receive $3 million in damages from two doctors who allegedly failed to diagnose her colon cancer promptly. The patient presented at the physician's office in 1992 with abdominal pain. Her family alleged that the doctors missed "red flags" pointing to cancer and turned down her requests to see a specialist. When she was referred, she was diagnosed with cancer that was too advanced to be cured. The patient, age 35, died in April 1994. In their complaint, her husband and son alleged medical malpractice and wrongful death causes of action. They also argued that the HMO's contract encouraged the doctors to save costs, thereby breaching their duty to the patient. **These types of malpractice lawsuits which focus on financial incentives are becoming common.**

Incentive to Perform Services for Which You Are Not Qualified

Due to managed care's emphasis on primary care, a primary care physician's (PCP's) financial responsibility for capitated services could include procedures that many PCPs are not equipped or trained to do. For example, removal of cysts, moles, growths, and simple skin biopsies; in-office Holter monitoring and treadmill stress tests; extremity X-rays; and splinting of sprains and simple undisplaced fractures may now be required by PCPs. While few primary care capitation agreements include things like Holter monitoring and stress testing, specialty procedures like allergy testing, suturing, excision of benign lesions, flexible sigmoidoscopies, pelvic exams, lab and radiology tests, ECGs, inhalation treatments, burn care, and immunizations for pre-school-age children are becoming more commonly included in these agreements. It is important to be aware of these issues as you negotiate contracts. Do not automatically assume that the scope of services the plan wants to impose on you is reasonable.

Physicians may wish to add to their clinical skills in order to decrease chances of liability, save referral costs and become more valuable to an IPA or HMO. Call the state or national association for the specialty in which you are seeking training and ask about course availability. Some hospital medical staffs also offer training programs. PCPs may also obtain direct supervision from a specialist. (However, specialists may not have a financial incentive to train primary-care doctors unless they are capitated themselves.)

However, even if your contract calls for performance of a particular service, if you do not feel entirely competent, refer to another physician competent to treat the particular condition regardless of financial incentives. Do not be tempted to try procedures you are not trained for, in order to avoid making referrals. A primary care physician or specialist should refer to a subspecialist where:

1. the care requires technology and/or competence that the physician does not have;
2. the physician has never done the procedure before, or has not done it for a long time.

In the matter of the *Department of Corporations v. TakeCare, California* Dept. of Corps. File No. 4.33-0290, the TakeCare HMO authorized an adult urologist to perform the removal of a Wilm's tumor in a child. The adult urologist had never removed such a tumor. Although the surgery was ultimately performed by a pediatric surgeon experienced in removing Wilm's tumors, TakeCare was fined $500,000 in part for authorizing the inexperienced adult urologist to do the surgery.[5]

If, despite your appeals, there is a problem with getting the plan to cover a referral to a (sub)specialist, you may wish to consider alternatives such as arranging for the

subspecialist to assist at your hospital, or for your performance of the procedure at the subspecialist's facility. (In *TakeCare*, the pediatric surgeon invited the urologist to assist in the removal of the tumor but the urologist did not accept the offer.) Obviously, such alternatives should be pursued only where the patient's welfare will be adequately protected. See section above on duty to appeal U.R. denials.

Incentive to Underutilize

Financial incentives create risk of underutilization and may be admissible as evidence in a malpractice case.[6] In 1995, an HMO was required by an arbitration panel, to pay $1.02 million dollars to the husband of a woman who died of breast cancer. The arbitration panel found that the HMO failed to authorize a medically necessary bone marrow transplant. One year previously, the HMO was hit with an $89 million dollar verdict also for failing to authorize a bone marrow transplant for a woman with breast cancer. That included **$77 million dollars in punitive damages.** The case subsequently settled for an undisclosed amount.

Among the arguments the plaintiffs made at trial in the latter case were that the HMO refused to pay for the treatment in order to save money. They contended, and apparently the jury believed, that the HMO executives got financial incentives and bonuses when they refused to authorize expensive treatments and procedures. The HMO denies this. In that case, the patient chose to pay out of her own pocket, rather than forgo the treatment (although she did die from the cancer). Presumably, her doctor had explained to her the risks of going without the treatment. In an effort to avoid liability due to financial incentives to underutilize, you may wish to follow the tips, below.

Don't Let Risk Get Too Large. Provisions which obligate the physician to bear financial liability for an unlimited dollar amount may be too financially risky, and could lead to underutilization. Such provisions may make the physicians liable for a percentage of the deficit in one or more risk pools, with no limitation on the dollar amount of the physician's liability. If the deficit is large, so will be the physician's loss[7]. Physicians should insist on capping their potential contribution at some maximum dollar amount, preferably not to exceed the amount of their withhold and/or potential bonus. This may also be achieved through the private purchase of stop-loss insurance.

Don't Let Risk Get Too Personal. If a physician's incentive payments are based solely on his or her treatment decisions, there may be a strong incentive to limit services for each patient, and potentially violate the standard of care. When payments are based on the performance of a group of physicians, on the other hand, the incentive is diminished. For example, when payments are based on the record of twenty physicians, a physician will feel only 5% of the impact of any one decision rather than the full impact of the decision. Also, under a capitation contract, when physicians have a large number of patients, the financial impact of one catastrophic case is not as great and chances of underutilizing may be decreased.

Negotiate a Contract Which Recognizes the Danger of Underutilization with Capitation. Below are some provisions designed to reduce the risk that capitation will be so low as to create an undue incentive towards underutilization (brackets [] indicate optional provisions or those which will differ depending on the contractual arrangement):

1. The capitation rate may fail to meet the intended financial objective of providing physician compensation at least equal [% of RBRVS for the physician locality fee schedule] or [% of what the Physician would have received on a fee-for-service basis]. If projected utilization is exceeded, the physicians will be paid on a fee-for-service basis pursuant to the fee set forth in Exhibit, for all services after the []% threshold has been reached.] [If the plan has a point of service option, and out of network utilization is lower than expected, reserves set aside from payment to non-contracting providers will be used to raise the capitation payment to capitated physicians where utilization of contracting physicians is greater than expected.]

and/or

Upon the Physician's written request, the [Board of Directors] may award additional compensation where such compensation is warranted to redress unfavorable financial outcomes for a single Physician given unusual circumstances which required services of Physician at a level or of type not reasonably contemplated in the capitation agreement.]

2. Where there has been a change in health care delivery which results in significant cost to the physician, the capitated payment shall be renegotiated, upon the physician's written request. (Examples of changes in the past five years for pediatricians are the recommendation for a second MMR for all children, HIB immunizations for infants starting at 2 months of age, and Hepatitis B immunizations for all newborns.)] **A dispute regarding whether conditions (1) through (2) above exist, is subject to arbitration.**

3. The parties shall agree upon changes in payment to reflect variations and/or changes in the Covered Benefits offered by [Plans or Payors] or new Health Plan contracts entered into by [Plan].

No changes in services or payment rates will be made without the written approval of both parties.]

4. The parties agree that certain covered services shall be paid by the plan at a fee for service, as opposed to the capitated rate. These mutually agreed upon services are listed in Exhibit and shall be paid by the [HMO] [IPA] in accordance with the fee schedule also set forth in Exhibit ___. Any new technology or procedure where billing is done "by report" and there is no CPT code, shall be paid at a fee-for-service rate.

5. The contracting physicians' financial responsibility for covered services provided to an individual beneficiary is limited to a set amount, or "stop-loss" level, of $ _____ per diagnosis per [contract] year. All covered services paid under the capitation are included in calculating the stop-loss threshold. The fee schedule set forth in Exhibit _____ will be used to calculate when the stop-loss level has been reached. After the threshold amount is reached, covered services will be paid for at the fee-for service rate set forth in Exhibit ___.

Restrictions on Referrals

Physicians should be particularly attentive to the risk inherent in contracts which permit the restriction of referrals for cost-containment purposes. A business entity may neglect to contract with an adequate number or variety of physicians or facilities in order to limit costs. Obviously, adverse consequences could result from restricting access to needed medical care. Physicians must satisfy themselves as to the adequacy of referral resources. Further, physicians should be certain that patients understand the financial ramifications of referral to non-contracting hospitals or physicians and document any discussions in that regard in the medical record.

Moreover, physicians must be aware that the acceptance of a physician or hospital by the plan may not be relied upon as an indication of the provider's competence in a particular specialty. A physician may be held liable for negligent referral if he or she simply refers to a physician or hospital on a managed care company's panel without first obtaining the requisite knowledge of that provider's ability.

Therefore, some effort must be made to ascertain the qualifications of the provider before any referral is made.

A plan's failure to authorize an out of network referral the physician believes to be medically necessary should be handled in the same way as a plan's inappropriate denial of care.

Treatment Protocols

The risk of liability may also be increased if physicians agree by contract to abide by treatment protocols established by a plan which are unreasonable generally or inappropriate in a particular case. Moreover, agreeing to provide services according to a stated "standard" may obligate the physician to a standard of care which is higher than that currently imposed by law, thereby increasing chances of legal liability. Example

(Actual Clause Taken from Managed Care Contract)

Physician shall maintain practice policies which support the provision of Medical Services to Members according to the following standards set forth below. Physician agrees not to exceed the specified intervals between a Member's request for service and the date/time Medical Services are rendered:

(1) Physician Exam/Well Baby Examination 30 calendar days
(2) Non Urgent Examination 7 calendar days
(3) Consult/Specialist Referral 14 calendar days
(4) Urgent Examination 24 hours
(5) Emergency Examination immediate access

At a minimum, this type of provision should specify that these are mere guidelines and that it is understood that due to many outside factors, physicians cannot be expected to provide care within the stated guidelines in every case.

Finally, from a physician's standpoint, are these guidelines reasonable? Can enrollees really expect a non-urgent exam from a physician within 7 days?

Patient Can Sue under Physician/HMO Contract

St. Charles v. Kender, 646 N.E.2d 411 (Mass.App.Ct. 1995), involved such a suit; the patient was an enrollee with the Tufts HMO. She became pregnant and called her physician's office for an appointment. Patient's first appointment with her primary care was set for September 23, 1987. On September 13, 1987, she began to bleed and experience pain. Over two days she made repeated calls to he PCP's office to report her distress and did not receive a call back until two days later. On September 14, she went to the Hospital, where she was diagnosed as having suffered a miscarriage. She then brought an action against the PCP claiming, in part, **breach of the contract between the physician and the plan.**

Under the contract with the Tufts HMO, the PCP agreed to provide health services for HMO members in a manner "consistent with professional standards of medical care generally accepted in the medical community at the time." **Note that many physicians' managed care contracts in Wisconsin read this way. The patient sued for a violation of this provision of the physician/HMO contract even though she**

was not a party to that contract. The court addressed the question of whether a subscriber to an HMO can maintain a claim based on the contract between the plan and the physician. (In "legalese," we ask: is the subscriber an "intended third-party beneficiary" of certain provisions of the physician/HMO contract?) The court found that in providing services under the HMO contract, the physician is, in reality, carrying out the plan's obligation to provide services to enrollees. The physician/HMO contract is, the court found, for the benefit of the enrollee. The patient, therefore, was found to be an "intended beneficiary" of the contract between Tufts HMO and the PCP, and was permitted to sue under that contract.

In suing the physician for breach of the physician's HMO contract, the patient argued that the PCP agreed to provide services and, when called upon so to do, rendered none. The court found that whether a two-day delay is an unreasonable time to get back to a patient is for a jury to decide. (If it were unreasonable, there would have been a breach of contract.) Moreover, the HMO handbook said,

> Occasionally, a situation may arise in which your Personal Care Physician has not returned your call within a reasonable length of time (1-2 hours). If this occurs, call [HMO telephone number] ... and a plan administrator will be available on call to assist you in obtaining health care.

The court found that this definition of reasonable response time, of 1-2 hours **is some evidence of an applicable professional standard; especially if compared to two days.** The court found that this language constituted a basis for a judge or jury to find that the PCP had committed a breach of contract. Nevertheless, the court ultimately found in the doctor's favor because the patient did not prove that she suffered actual damages because of the physician's breach of contract. Since the plaintiff could not prove that her miscarriage resulted from her physician's failure to return her phone call, the breach of contract claim was dismissed.

What Physicians Can Learn from *St. Charles*.

1. **Return your patients' calls.** Make sure you have enough staff whose job it is to **return calls promptly**. Otherwise, emergency circumstances could go untreated.

2. Be careful not to oblige yourself to standards that you may not be able to meet, e.g., standards which are higher than the standard of care. For example, agreeing to provide services "with the highest standards of competence" may obligate you to a standard of care which is higher than that currently imposed by law, thereby, increasing chances of legal liability.

3. Physicians (especially those serving on HMO boards and committees) should be sure that plan documents do not contain protocols like "reasonable response times," or "reasonable waiting periods" for appointments, **as these may be used against a physician who does not meet them.**

4. Make sure your plan contract includes a provision like the following, stating that it does not create any liability toward any third party:

Nothing in this agreement is intended to, nor shall be deemed or construed to create any rights of remedies in any third party, including an enrollee.

Although *St. Charles* is not a Wisconsin case, it may be considered by Wisconsin courts faced with similar issues.

On-Call Physician

Plan physicians designated by the plan to be "on call" for plan patients, once called by the emergency room, have a duty of care to the patient and may be sued for malpractice. Essentially, the physician so designated assumes the same responsibilities to respond with respect to plan patients as a physician who is "on-call" to a hospital emergency department assumes. The on-call physician can incur liability for his decisions or advice with respect to the patient even if he never actually "sees" the patient. See e.g., *Hand v. Tavera, M.D.*, 864 S.W.2d 678 (1993).

Hold Harmless Clauses

Following is an example of a hold harmless clause:

> The Physician shall be responsible for the quality of care rendered to the participants and shall hold harmless, indemnify and defend the HMO, its administrators, officers, directors, and trustees from any litigation costs, claims, judgments, liability and damages resulting from the medical, surgical and/or other medical care rendered to the participant under this contract, including any legal damages, costs of adjustments or investigations, attorney's fees or any other costs.

The execution of a hold harmless clause may result in the physician assuming liabilities for the plan. Most professional liability policies specifically exclude such "contractually assumed" liability from coverage. Consequently, the physician would be going bare as to liability assumed under the contract. If the case goes to trial or is settled, the physician and not the physician's carrier would be responsible for the plan's attorneys' fees, costs, as well as the entire settlement or judgment, even if the plan's U.R. decision caused the patient's damages.

The Implied Hold Harmless Clause

Sometimes hold harmless language is not explicit, and is not flagged by the headline "hold harmless

clause." Such hold harmless clauses may be disguised or "implied." Implied hold harmless clauses require the physician to be "solely responsible" for medical care or treatment decisions. Also look out for "exclusively responsible." These types of phrases may be used by a plan in order to shift liability in cases of alleged malpractice. A similar type of implied hold harmless clause is found with language which states or implies that, regardless of the plan's refusal to authorize (i.e., pay for) care, the physician accepts sole responsibility for medical care. Here is an example:

> Physician agrees that regardless of the HMO's decision to deny access or payment for care, it will not affect medical treatment.

Physicians are well-advised to negotiate deletion of both express and implied hold harmless provisions in their contracts in order to avoid complications in the event of litigation. If the physician and the plan become co-defendants in a malpractice case, the contract will be part of the evidence that can be used against the physician. The contract could also be the first document the plaintiff's attorney relies on to understand the complicated physician/payor relationship. The managed care plan's chances of success in the litigation are improved when it can show that the physician agreed that payment for care would not affect medical treatment. Conversely, the physician's chances of avoiding an unfavorable verdict are enhanced when the physician contract does not contain such language.

Plan Malpractice Insurance/ Financial Viability

Although the contract often sets forth insurance requirements for the physician, no such requirements are usually set forth with respect to the plan. A plan that is conducting utilization review runs the risk of being sued for malpractice and therefore needs malpractice liability insurance. Physicians need to be sure that the plan has such insurance so that they don't become the sole "deep pocket" in the event litigation ensues. Physicians should request to see evidence of such insurance on an annual basis.

In Wisconsin, a defendant whose causal negligence is found to be greater than that of a plaintiff is individually responsible for such defendant's proportionate share of a damages award to a plaintiff if the defendant's contribution to the cause of the injury is less than 51%. Where a defendant is at least 51% causally negligent, that defendant will be jointly and severally liable for the total damage award. Wis. Stat., 895.045, *as amended by* 1995 Wis. Act 17[8]. Effective May 25, 1995, the legislature enacted a $350,000 cap (to be adjusted annually by the Director of State Courts to reflect changes in the consumer price index) for all health care providers on non-economic damages in medical negligence cases in which the claim accrued on or after the statute's effective date. Wis. Stat.§§893.55(4)(d), *as amended by* 1995 Wis. Act 10; 655.017.[9]

OTHER RISKS CREATED BY CONTRACTUAL PROVISIONS

Arbitration

Some managed care contracts require disputes between the parties to be settled by arbitration. Physicians are advised to seek the opinions of their professional liability insurers to determine whether the arbitration provision conflicts with or limits the coverage of existing insurance. Because arbitration has different rules than a civil court trial, some defense counsel and carriers believe that arbitration can compromise the defensibility of a claim. **The contract should make clear whether the physician is agreeing to submit disputes with plan members to arbitration. If so, again, the physician's carrier should be consulted before such a provision is signed. If the arbitration clause does not cover claims by enrollees, this should be specified.** Contract language may specify that the physician is not required to arbitrate a dispute if his or her risk carrier does not agree to the arbitration.

Enrollee Grievance Procedures

Physicians required to comply with enrollee grievance procedures should carefully review them before the contract is signed. Grievance procedures may require the physicians to waive privileges regarding the discoverability of information that apply during the defense of a malpractice action. Therefore, some malpractice carriers recommend that physicians decline to agree to grievance procedures until the procedures are reviewed by the carrier's legal department.

Medical Records

Physicians are cautioned that contractual requirements relating to medical records should not be viewed as superseding existing state law on the subject. In other words, if there is any doubt about the release of medical records, physicians should obtain professional advice and not rely on contractual requirements to protect them from liability for improper disclosure. The SMS Legal Department is available to answer general medical record release questions. Also, *A Physician's Guide to Wisconsin Health Law*, published by the SMS, is an excellent resource.

By signing a managed care contract, physicians usually agree to preserve billing and/or medical

records for a term set forth in the contract or for such time periods as required by applicable laws, regulations and practices. This obligation to maintain records exists even if the contract is terminated. In 1996, the Wisconsin Medical Examining Board promulgated a rule requiring physicians to maintain a patient's health care record for five years from the last visit. In addition, malpractice carriers generally recommend that patients' medical charts be maintained at an absolute minimum for ten years following the last patient visit. The State Medical Society also recommends medical records be maintained for a minimum of ten years. This recommendation is based upon Wisconsin's Statute of Limitations governing malpractice actions and the court's interpretation of the statute. The Statute of Limitations sets the time frame within which a patient may sue a physician for malpractice. If the patient does not bring the suit within the time frame, the suit is barred from commencing.

Amendment

Amendment provisions discuss how physicians and the plan are to go about making changes to the contract. There is one common problem with the amendment provisions in most managed care contracts. While, generally speaking, physicians are required to get the plan's written agreement to any amendment, the plan may use various contractual language which allows it to change the contract without physician consent. It may be possible to avoid such language by carefully reading the contract, crossing out any provision that allows the plan to unilaterally amend the contract, and including a provision which permits amendment only upon the written agreement of both parties, as follows:

> The contract may be changed or amended only by the mutual written consent of both parties hereto.

With this type of provision, future changes to the contract must be agreed to in writing. However, even with this type of provision, other provisions within the contract which expressly authorize changes to be imposed unilaterally by the plan may be binding, unless they are negotiated out of the contract (e.g., a provision which allows the withhold to be changed at the plan's discretion).

"Gag Rules"

Some contracts prohibit the physician from speaking or otherwise communicating about the plan in a negative fashion either to enrollees or others. Such a provision may read as follows:

> Scope of Services. In no event shall physicians provide services to an Enrollee beyond those prescribed by the referring Participating Physician. Should Physician disagree with the referring Participating Physician relative to the scope of services prescribed, Physician shall discuss the basis of such disagreement with the referring Participating Physician and, if the disagreement cannot be resolved, with the Medical Director. Under no circumstances shall such disagreement be expressed to the Enrollee.

These types of provisions would appear to constitute an undue interference with the physician/patient relationship. Physicians should negotiate for deletion of these types of provisions, as these could require physicians to withhold information necessary to treatment and quality patient care. A contract provision such as described above may also violate Wisconsin law and/or be considered by the Wisconsin Medical Examining Board as an attempt to force a physician to act in a manner deemed unprofessional conduct.

Perhaps most importantly, HCFA recently issued letters to plans relating to this issue. According to the letters, because the Medicare and Medicaid patients who are in HMOs are entitled to all benefits available in standard Medicare and Medicaid programs, and one of those benefits is advice from physicians on medically necessary treatment options, any contract that limits doctor patient communication is in violation of federal law.

Practice Guidelines, Protocols or Parameters

A managed care contract may require the physician to abide by certain medical practice guidelines. Such guidelines should be labelled as such and used by the physician only as guidelines. The physician can be held liable if he or she does not provide medically necessary care, in order to comply with existing criteria. Criteria should never be placed ahead of the physician's own medical judgment. When required to abide by clinical practice guidelines, consider the following:

1. Many guidelines are based on best case scenario, i.e., what should be done under the best conditions. Many cases may be treated within the guidelines, but the guidelines will not work for all relevant cases. Generally, guidelines are for patients without significant co-morbidity or any complications. Physicians should inquire as to whether the guidelines make exceptions for complicated cases.

2. Determine whether length-of-stay guidelines are modified locally to reflect practice patterns, resources, and special needs of the geographic area involved. A health care systems' resources for dealing with early discharge may differ. Short hospital stays generally necessitate hospital holding facilities and sub-acute beds, adequate home health care and intra venous services, skilled nursing facilities, and outpatient

surgical facilities. For guidelines to be followed successfully, rather extensive step-down facilities and support services should be available. This may not be the case in a rural area, for example.

3. When you have to go outside the guidelines, **document clearly why you are deviating from the guidelines.** For example, if home health care is not going to be available when the parties thought it was, the physician should let the plan know and it should approve additional hospital time.

4. When a payor is unreasonable, stand your ground. Payors may listen to reason. Physicians are reminded that a plan's failure to authorize or pay for care does not relieve the physician of responsibility or liability for the patient. If the plan makes a decision not to authorize or pay for certain services, the physician is obligated to take reasonable steps to protest (appeal the decision) on behalf of the enrollee.

5. Finally, be sure the standards are set by physicians of the relevant specialty, and reflect current research findings and appropriate clinical expertise. You may wish to compare any guidelines with those of your specialty society.

Contact Us With Questions

We hope this information is helpful to you. The SMS is unable to provide specific legal advice to each of its more than 8,600 members. For a legal opinion concerning a specific situation, consult your personal attorney.

For information on other legal issues, contact Mark Adams, SMS General Counsel or Kalisa Barratt, SMS Assistant General Counsel, or consult the SMS publication, *A Physician's Guide to Wisconsin Health Law.* This guide contains legal information on a variety of subjects of everyday importance to practicing physicians. Written and edited by SMS' Office of General Counsel, Volumes II and III are currently available. The 1997 revision will be distributed to all SMS members in October 1997. To contact the SMS Office of General Counsel, call (800) 362-9080 or send e-mail to: MARKA@smswi.org or KALISAB@smswi.org.

References

1. Ethical considerations surrounding managed care have been addressed in AMA policy 285.982, and are beyond the scope of this paper. Copies of the policy are available from the AMA or the State Medical Society.
2. See Wis. Stats., §448.30.
3. *See Wickline v. California* (1986) 192 Cal.App.3d 1630, 239 Cal.Rptr. 810; and *Wilson v. Blue Cross* (1990) 222 Cal.App.3d 660, 271 Cal.Rptr. 876.
4. California Business & Professions Code §2056 (1994).
5. Note that in a 1996 Wisconsin Supreme Court decision, the Court, although refusing to establish a "bright line rule," held that the failure to adequately disclose a physician's experience or inexperience in performing an operation and failure to give a comparison of the morbidity and mortality rates for surgery among experienced and inexperienced surgeons, was admissible to prove a breach of the physician's duty of informed consent. *Johnson v. Kokemoor*, 199 Wis.2d 615 (1996).
6. One Illinois court has held that the existence of incentive arrangements is irrelevant to a malpractice cause of action, as the only relevant issue is whether or not the standard of care was met. (*See Bearden v. Hamby*, 608 N.E. 2d 282 (1992).)
7. The Wisconsin Office of the Commissioner of Insurance has raised another issue in this regard. According to a letter dated November 13, 1995, OCI will consider a provider who assumes all or part of the risk for health care expenses or service delivery (including withhold or pooling arrangements) as engaged in the business of insurance. As such, the provider must be duly licensed by the state.
8. However, note, that if two or more parties acted in a common plan or scheme, they are jointly and severally liable for all recoverable damages (except punitive damages) resulting from their actions. Wis. Stat., §895.85(2). Punitive damages are not recoverable in medical malpractice actions in Wisconsin. *Lund v. Kokemoore*, 195 Wis. 2d 727 (Ct. App. 1995).
9. Certain non-economic damages in wrongful death actions are also capped at to $150,000 in medical malpractice actions. Wis. Stat., §§ 893.55(4)(f); 655.017.

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Your Financial Fitness

Where There's A Will. . . .

by Michael J. Dolan, CLU, ChFC

No matter how much or how little you own, you need a will.

Without a will, everything you've worked to acquire will be distributed according to the laws of our state. That may or may not be what you would have wished.

Don't assume, for example, that your surviving spouse will get it all. If you have children, state law requires that some portion of your assets go to the children. If they are minors, your spouse or a court-appointed guardian will have to get permission to spend their money on their behalf.

Only with a will can you leave everything to your spouse, knowing that he or she will care for the children. Only with a will can you name a guardian of your choice to care for those children if your and your spouse should die. Only with a will can you leave something to a favorite charity or a friend.

You can direct the disposition of some property without a will. In certain instances, when you own a house or a bank account jointly, the survivor will automatically own the property. Beneficiary designations on life insurance policies and on retirement accounts also take effect without a will. And some people establish living trusts to govern the disposition of their property.

Even if you own property jointly, name beneficiaries to everything possible, and/or have a living trust, you still need a will. It's virtually impossible to distribute every last piece of property in one of these ways. And what if your estate winds up receiving a lot of money because you die in an accident?

You should have a will. If your affairs are simple, you might rely on a software program and prepare your own. If your personal or financial affairs are at all complex – if, for instance, you own a business or have children from a prior marriage – you should consult an attorney.

In your will, you'll name an executor to carry out its provisions. This is a big job, involving inventory assets, paying debts, filing income and estate tax returns, distributing bequests and eventually, liquidating the estate. Choose someone who is both capable and willing to do the job, and name a backup executor in case the first is unavailable or unwilling to serve when the time comes.

Once your will is prepared and signed, with the proper number of witnesses, keep it in a safe place such as your lawyer's office or a fireproof box at home. Since safe deposit boxes are often sealed at death, they are not a good choice. Let your executor and family know where the will is, so they won't waste time searching.

Write your will so that it reflects your current wishes. Then review it periodically, especially when an important event occurs, to make sure it's still up-to-date. Important events include:

- Marriage, divorce or remarriage
- Becoming a parent or grandparent
- Moving to another state
- Any significant change in your personal or financial affairs.

Dolan is president and chief operating officer of SMS Insurance Services and a member of the National Association of Life Underwriters. He can be reached at SMS ext. 550, or via e-mail at: MIKED@smswi.org.

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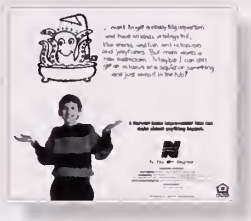

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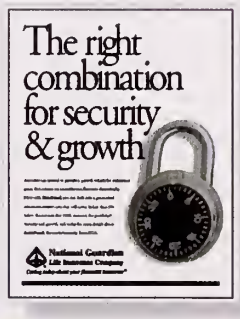

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WMJ

November 1997

EXTINGUISHING TOBACCO USE IN WISCONSIN

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Judith D. Burke

Editor's Column

Tobacco Awareness: Vigilance Required

As you know, every November, in conjunction with Tobacco Awareness Month, the *WMJ* highlights progress being made in the battle against cigarette smoking.

Smoking and tobacco uses have escalated to the point of being a public health epidemic. Physicians are uniquely poised to address the concerns surrounding this enormous issue.

Many patients want guidance from their doctors about how to become free of the prison of smoking. Educating existing smokers about the hazzards of nicotine use is crucial to helping patients decide to quit.

But as even the cigarette manufacturers have pointed out, smoking is addictive, and behavior modification, while an integral part of cessation efforts, is, for many smokers, only the tip of the iceberg. Physicians must help their patients deal with the addictive nature of smoking. This month, we've tried to update you on efforts to educate and help patients choose to, and be able to, quit.

In her President's Page column on **page 5**, Dr. Osborn offers her thoughts about how far we've come and how far we have to go in this particular health war.

Joseph Bluestein, MD, discusses how physicians can address the issue of smoking during office visits. In *Tell Your Patients to Stop Smoking!*, on **page 14**, Dr. Blustein points out that 70% of patients who smoke want to quit. What you tell them, the resources you can offer them, does make a difference.

Tobacco has been used for centuries, as Jenny Braun points out in her editorial, *A Brief History of Tobacco* on **page 17**. While first used in pipes, tobacco was eventually rolled in plant leaves and smoked, or sniffed in a powder form, or even used as a juice for medicinal purposes. In addition to the addictive nature of tobacco, it is a part of our social heritage, one not easily abandoned.

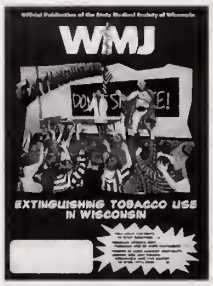
Our feature articles this month take a look at some of the efforts we described last year. In *Tobacco Update 1997: "Global Settlement" on Hold* on **page 19**, we look at the proposed settlement with the tobacco industry and where it's at one year later. And in *Tobacco Update 1997: Tobacco Use by Kids Increases* on **page 23**, we see that despite efforts, children continue to succumb to the cigarette, and at earlier and earlier ages. Marc Kennedy provides us with some sobering statistics about children's use of tobacco products and the efforts of the Center for Tobacco Research and Intervention at the UW Medical School to fight the growing trend.

In the **Wisconsin Medical Journal**, you'll find several papers addressing the issue of tobacco use, as well. *Trends in Lung Cancer Mortality Among Men and Women, Wisconsin and the United States, 1979-1994*, begins on **page 30**. You'll also find two local studies, *Smoke-free Workplaces, Wisconsin Municipal and County Government Buildings, 1996*, on **page 34**, and *Enforcement of Minor Tobacco Laws: Wisconsin, 1996*, on **page 37**, which addresses how municipalities around the state deal with violations of the tobacco laws for children. The SMS is committed to furthering the education and raising awareness needed to wage the war against tobacco. The health of Wisconsin citizens depends on our efforts.

Finally, while not related to tobacco use, be sure to see this month's column **From the Office of General Counsel**. Kalisa Barratt, SMS Associate General Counsel, tackles the important issue of creating compliance plans to avoid fraud and abuse her article, *Combating the Fraud Squad: Corporate Compliance Programs are of Utmost Importance*, which begins on **page 53**.

WMJ

Official Publication of the State Medical Society of Wisconsin



COVER THEME: TOBACCO

The SMS supports efforts at all levels to help increase public awareness about tobacco addiction. The AMA's anti-smoking superhero, The Extinguisher, educates children about the hazards of smoking. He has visited several Wisconsin communities this year sponsored by the SMS and county medical societies. The Extinguisher is an exciting symbol of the battle being fought by physicians and other health care leaders for patients' lives.

Cover photo taken at Pioneer Elementary School, Ashwaubenon, by Carole Pollack, Carole Pollack Photography, Milwaukee, WI. Cover design by Eric Landmann, TypeTronics, Madison, WI.

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President's Page

We Have Just Begun to Fight

by Sandra L. Osborn, MD, Verona

The SMS began an organized approach to the prevention of tobacco use, especially the initial use by youth, as a result of Dr. Pauline Jackson's concerns and priorities during her Presidential year. In her inaugural address, she challenged the physicians of the state to take every available opportunity to discourage tobacco use and offer support and treatment for our patients who want to give it up (*WMJ*, July 1993). She detailed areas of special concern: children, teenagers and women, especially those who are pregnant, as groups that never starting the tobacco habit which leads to addiction, reducing the amount of tobacco use, and quitting altogether, would see immediately-recognizable benefits. Education and legislated restriction of smoking had already brought some benefits, but the tobacco industry was pressing on with its denials of cause and effect, and its efforts to increase sales through imaginative product promotion (e.g., wearable gifts bearing logos) and sales (e.g., small 10-packs that could be more cheaply purchased and hidden).

Over the years, there have been many excellent articles in the *WMJ* detailing scientifically the health risks that occur as a result of tobacco smoking for our patients. I recommend a review of these articles, as they are just as pertinent today. The November, 1993, issue contained an article titled, *A New Public Health Strategy to Control the Hazards of Tobacco Use* by Richard Yoast, PhD, Madison. This article gives us a useful listing of the history of organized efforts against the harmful effects of smoking. It noted that the efforts being used were effective for selected individuals, but failed to reach large numbers of smokers and potential smokers. Smoking was stated to be a social issue, not simply an individual behavior option, and a new approach outlined social interventions to be implemented, through broad-based public-private partnerships and coalitions, and ongoing public and private institutional commitments to address tobacco issues. This article is as illuminating now as it was then, and we have made it available on WISMED at: **www.wismed.com/members/journal.htm.**

About a year ago, a new partnership was offered to us by Wisconsin Attorney General James Doyle to combat the tobacco industry. He needed our help; he was determined, persistent and spoke persuasively about his desire to file a lawsuit against the tobacco industry to recoup expenses the state bears for smoking-related illness and disabilities.

I am proud that our Society agreed to support him with our money and with our talents. The SMS Foundation has created a Tobacco Litigation Fund and is nearing the goal of raising $10,000 to support Doyle and the State of Wisconsin's efforts. But wouldn't it be even better to surpass that goal! Additional donations will be targeted toward tobacco education efforts. I urge each of you as individuals and as county medical society groups to support this fund. At the public level, this provides recognition to the SMS for supporting this worthy effort. At the personal level, you receive tax credit for a donation (where applicable). And, if the lawsuit is successful, the SMS Foundation may see a return of the funds.

Important battles have been won. Can we now sit back and wait for the peace treaty and the medals to be distributed for a battle well fought? Obviously the answer is a resounding NO. Our enemy is a formidable one and there are many battles waiting to be fought and won before the war is over. You can continue to be a part of the ongoing efforts through activities such as hosting a visit by the AMA's Extinguisher to your community, and by your financial support of the efforts of our state against the tobacco industry.

Dr. Jackson ended her comments in the November 1993 *WMJ* with an admonition which I will repeat, as it is still as important today as it was four years ago: "Please read this *WMJ* issue and do what you can to decrease potentially preventable illnesses, miseries and early deaths from tobacco use."

EVP Report

John E. Patchett, JD

Advocating for physicians and patients usually conjures up an image of government relations activities. In our recent census, 76% of the physician respondents rated "expanding SMS patient and physician advocacy beyond its traditional governmental focus to include: mentoring, legal support, assessing and influencing the quality, accessibility and delivery of care" as their top objective for the SMS. The SMS is currently very active in expanding our non-traditional advocacy efforts, including significantly expanding our legal activities. This is absolutely critical given today's rapidly changing practice environment.

This month, Mark Adams, JD, Vice President and General Counsel, updates you on the advocacy efforts of your Office of General Counsel and the many legal advocacy services available to SMS members.

Legal Advocacy: An SMS Member Benefit

by Mark Adams, JD, SMS General Counsel

The Office of General Counsel (OGC) provides legal services to the SMS and its subsidiaries. The General Counsel and Associate General Counsel give legal guidance to SMS commissions, the SMS Board of Directors and the House of Delegates. The OGC also acts as a legal advocate for our physician members and their patients. The following is a summary of some of the activities undertaken by your OGC.

Legal Advocate in Courts

The Office of General Counsel continuously monitors Wisconsin appellate-level court cases that could affect physicians and their practices. When a case has the potential to create new law or change current medico-legal jurisprudence, the OGC may request that the SMS Board of Directors approve the filing of an amicus (friend of the court) brief. An amicus brief does not argue the facts of the particular case, but rather focuses the court's attention on the public policy ramifications of the case at bar and highlights to the court how its ruling could change physicians' practices statewide. Often, physicians and attorneys involved in the case will request SMS' involvement because of the significant weight an SMS amicus brief carries. By performing this function, the SMS continues to be a strong voice for physicians in Wisconsin courts. The SMS is also a member of the AMA/SMS Litigation Center which files amicus briefs and supports other legal activities on behalf of physicians on a national level.

Mediation and Peer Review Commission

This commission is staffed by the OGC. Its dual roles serve both the physician and his or her patient. Mediation provides physicians and patients a neutral forum to address specific matters relating to quality of care and professional ethics. Where a quality issue is identified by the members of the commission, educational information may be provided to aid the physician's and patient's understanding of the issue. The peer review function provides objective medical peer review for physicians, clinics and hospitals including appropriateness of care and quality assurance. Objectivity is achieved through the use of physician reviewers of like specialty who have no economic, professional or social relationship with the review subject. The review is conducted with physician and patient identifiers removed.

Practice Management Issues

Attorneys on staff are available during normal business hours to answer physician and patient telephone calls relating to general health care-related legal and

practice management questions. If you or your staff have a legal question, you may call the OGC at **(800) 362-9080.**

A *WMJ* monthly column entitled "From the Office of General Counsel" helps keep members abreast of current legal subjects and gives practical solutions to practice problem areas. These articles are also reproduced on the SMS members only World Wide Web site (**www.wismed.com**).

Our attorneys are frequent lecturers at SMS seminars throughout the year. Look for an upcoming seminar on the recent Medicare fraud investigations into health care providers and how you can create an effective corporate compliance program. Likewise, they are a part of the SMS speaker's bureau, and may, for example, be keynote speakers at County Medical Society meetings.

The OGC also produces a variety of brochures to help physicians manage their practices most efficiently. The most recent one being "Contracting with Managed Care Organizations."

Additionally, the OGC publishes *A Physician's Guide to Wisconsin Health Law*. This 300-page book is a vital legal reference for physicians and their office staff and is distributed to all SMS physicians as a member benefit. The recently-released 1997 edition comes in a handy 3-ring binder for ease in updating.

Medical Staff Bylaws Review

Often, changes made to hospital medical staff bylaws are drafted by the hospital attorney on behalf of the hospital. Our bylaws review service gives medical staff an opportunity to have the proposed bylaws changes reviewed by an attorney who considers the best interests of the medical staff. Using case law, JCAHO guidelines and the Wisconsin Hospital Code, a complete, written review of the bylaws and any associated problem areas is available to members upon request.

Managed Care and Employment Contract Review and Negotiating

This free member benefit "red flags" problem areas in physician employment and managed care contracts. Meant to be educational in nature, attorneys will analyze and comment upon specific contract provisions. Advice on negotiation tactics is also available. In fact, this is an increasingly important area and we are expanding resources and services available for members in 1998.

Ethics

The OGC is also available to assist answering ethical questions that arise in practice. This is especially critical when the physician's ethical and legal duties may conflict.

Please contact the OGC with any questions or comments you may have. We're your legal reference source and will provide any possible assistance.

Contact **Mark Adams at SMS ext. 234 or via e-mail at: MARKA@smswi.org or Kalisa Barratt at SMS ext. 233 or via e-mail at: KALISAB@smswi.org.**

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SMS Alliance

SMS and the Alliance Work Together

by Maxine Omdahl
President SMS Alliance, Racine

In April at the SMS House of Delegates, I addressed the SMS membership about the importance of the SMS and the Alliance joining forces to increase membership and to network together on community health projects. In the spirit of collaboration, we have initiated this column to feature Alliance news and highlight community health projects taking place throughout Wisconsin. I am pleased to report that the Alliance, Wisconsin's physician spouses, is hard at work.

October was Domestic Violence Awareness month and the Alliance promoted physician awareness through the distribution of knotted **Black and Blue ribbons**. These ribbons symbolized the physical and emotional bruises, the knotted stomachs and clenched fists, and the frayed lives and fabric of our society as a result of the trauma of domestic violence. They were sent to every legislator in the state and to each member of the SMS Board of Directors. Governor Thompson was presented with his black and blue ribbon at a press conference at the Capitol to launch a statewide media campaign against Domestic Violence. County Alliances participating in this project distributed the ribbons to county physicians and hospital staff to heighten awareness of the pain of violence and to remind physicians of the important role they play in the detection and intervention of domestic violence.

The **35th Annual Workshop on Teen Health** was held November 12 at the Waukesha Exposition Center in Waukesha. Over 750 7th and 8th grade students from schools all over southeastern Wisconsin attended the four-hour conference. The S.O.S. Players from Hudson and other stimulating speakers as well as a panel of teen parents spoke to the youth about the importance of making healthy choices rather than living with the consequences of poor choices that can affect the rest of their lives. Particular topics addressed this year were teen pregnancy, alcohol and drug abuse, and positive peer conflict resolution. The SMS has funded this workshop for 35 years and we trust many young lives have been positively influenced by this experience.

At the request of the SMS Commission on Injury Prevention and Control, **Bike Helmet Prescription Pads** have once again been printed by the Alliance and are available through SMS Policy Analyst **Lynn Sherman at ext. 235 or by e-mail at: LYNNS@smswi.org**, for use in your practice. Emergency room physicians, pediatricians and family physicians have used them to "prescribe" the use of bicycle helmets for children in an effort to prevent serious head injuries due to bicycle falls.

These are but a few of the projects underway and we will continue to highlight community health efforts. Projects like these promote a healthier, safer lifestyle for Wisconsin citizens and provide a venue to showcase the talents and volunteer spirit of physician spouses. The Alliance is another of medicine's faces to the public and we want you to know we do not take the opportunity to represent physicians in the community lightly.

For more information on the Alliance, contact **Maria Van Cleve at SMS ext. 263 or via e-mail at: MARIAV@smswi.org.** Ms. Omdahl receives e-mail at: nmomdahl@internetmci.com.

Who's In The News

Alphonse DeLucia III, MD

Rick A. Erdman, MD

Tracy Gallagher, MD

Aaron Hanesworth, MD

Nancy Hausman, MD

Daniel M. Albert, MD, MS, FA, Davis Professor and Chair of the University of Wisconsin Medical School Department of Ophthalmology and Visual Sciences, received the Lighthouse Pisart Vision Award, a major prize for contributions to the prevention, cure, treatment or care of blindness. Doctor Albert earned his medical degree from the University of Pennsylvania School of Medicine and completed his internship and residency in ophthalmology at the Hospital of the University of Pennsylvania. The author of more than 500 research publications and book chapters, Albert is internationally recognized for his studies of two life-threatening eye tumors: retinoblastoma and ocular melanoma. His 1990 description of the model of genetic retinoblastoma launched a whole new research era on the development and treatment of this tumor. In addition, as director of the Pathology Center for the National Institute of Health's Collaborative Ocular Melanoma Study (COMS), Albert is one of the leaders of a long-term trial comparing two established treatments for his melanoma.

George Cherayil, MD, a family physician, joined the medical staff of Doctor Bradley Fedderly's practice, South Milwaukee and Covenant Medical Group. Doctor Cherayil earned his medical degree from the Medical College of Wisconsin, 1994. He completed an internship and residency in family practice at St. Michael Hospital, Milwaukee, 1995 and 1997. Doctor Cherayil is a member of the American Academy of Family Physicians, and Wisconsin Academy of Family Physicians.

James R. Clemens, MD, an otolaryngologist, joined the medical staff of Prevea's, Webster. Doctor Clemens earned his medical degree and completed his residency at the University of Cincinnati. He completed his surgery residency and internship at Methodist Hospitals of Memphis, TN.

Alphonse DeLucia III, MD, a cardiovascular and thoracic surgeon, joined the medical staff of Marshfield Clinic. He earned his medical degree from the State University of New York Health Science Center, Syracuse, NY and completed a residency in general surgery at the University of Michigan Hospitals in Ann Arbor, MI; a fellowship in vascular surgery research at Jobst Vascular Research Laboratory, University of Michigan; and a fellowship in cardiothoracic surgery research at the Cardiovascular Research Center, University of Iowa Hospitals and Clinics. He also completed specialty training in cardiothoracic surgery at that institution. He is a member of American Medical Association, American College of Surgeons and the Association of Academic Surgery.

Rick A. Erdman, MD, an internal medicine specialist, joined the medical staff of the Gundersen-Mubarak Clinic, Tomah. Doctor Erdman earned his medical degree from the American University of the Caribbean School of Medicine, Montserrat, British West Indies, 1993. He completed his internal medicine residency and internship at Gundersen Medical Foundation/ Lutheran Hospital-La Crosse, 1995 and 1997. He is a member of the American College of Physicians-Associates, vice chairman, 1995 to 1997, the American Medical Association, and the American Society of Internal Medicine.

John Foreman, MD, on the All Saints Medical Group medical staff, received the Academy's Pediatrics Review and Education Program Education Award. The award recognizes academy fellows who have earned a minimum of 150 AAP-approved continuing medical education credits over three consecutive years including a minimum of 76 credit hours through participation in PREP educational programs.

Tracy L. Gallagher, MD, a family physician, joined the medical staff of Prevea's Clinic, DePere. Doctor Gallagher earned her medical degree from the University of Wisconsin and completed her residency at Appleton Medical Center.

Mitchell Manthey, MD

Abid Mohiuddin, MD

Craig Saltzgiver, MD

Mark Schick, MD

William Scorby, MD

Aaron J. Hanesworth, MD, a family practice specialist, joined the medical staff of Gundersen-Mubarak Clinic, Tomah. Doctor Hanesworth earned his medical degree from the Northeastern Ohio University College of Medicine, Rootstown, 1994, and completed his residency at the Waukesha Family Practice Residency Program in 1997.

He is a member of the American Academy of Family Practice, and the American Medical Association.

Nancy J.B. Hausman, MD, a neurologist, joined the medical staff of Marshfield Clinic. She earned her medical degree from the University of Illinois College of Medicine in Chicago; completed both her residency in neurology and a fellowship in sleep medicine and electrophysiology at the University of Iowa Hospitals and Clinics.

Mark Hsu, MD, cardiologist and internist, joined the medical staff of Mercy Health System and the Mercy Regional Heart Center. Doctor Hsu earned his medical degree from the Medical College of Ohio, Toledo. He completed his internship and residency in internal medicine at the Akron General Medicine Center and a fellowship in cardiology at the Jewish Hospital of St. Louis.

Eva LaRocque, MD, a psychiatrist, joined the medical practice of Dr. Theodore Weltzin in Baraboo. Doctor LaRocque earned her medical degree at the University of New Mexico School of Medicine and completed a psychiatric residency at the University of Wisconsin Medical School. Doctor LaRocque focuses on general adult psychiatry, mood disorders, anxiety disorders, and geriatric psychiatry.

Mitchell W. Manthey, MD, a gastroenterologist, joined the medical staff of Prevea's St. Mary's Hospital. Doctor Manthey earned his medical degree from the University of Wisconsin Medical School. He completed a residency in internal medicine at the University of Minnesota Hospital and Clinics in Minneapolis, and a fellowship in gastroenterology at the Medical College of Wisconsin in Milwaukee and Racine. Doctor Manthey is board certified in gastroenterology and internal medicine.

Abid Mohiuddin, MD, a primary care physician, joined the medical staff of Coloma and Westfield Family Medical Centers. Doctor Mohiuddin earned his medical degree from Dow Medical College in Karachi. He completed post graduate work at Dow Medical in internal medicine, neurology and anesthesiology and a three-year internal medicine residency at Cook County Hospital, Chicago.

Craig Saltzgiver, MD, an internist, joined the medical staff of Baraboo Internal Medicine. Doctor Saltzgiver earned his medical degree at the University of South Dakota School of Medicine and completed his residency at Marshfield Clinic. Doctor Saltzgiver has a 26-year military career.

Mark R. Schick, MD, an orthopedic surgeon, joined the medical staff of Prevea's East Mason Clinic. He earned his medical degree from Stritch School of Medicine at Loyola University, IL. Doctor Schick completed his residency at Northwestern University Medical School in Chicago and is board certified.

William R. Scorby, MD, a specialist in occupational health and preventive medicine, joined the medical staff of Gundersen Lutheran Medical Center, Sparta. Doctor Scorby earned his medical degree from the Chicago Medical School in 1987. He completed his internship at Portsmouth Naval Hospital, Portsmouth, VA and his residency in environmental and occupational medicine at the University of Pittsburgh graduate School of Public Health, a Division of Environmental and Occupational Medicine, from 1992 to 1994. Doctor Scorby was a Navy flight surgeon and primary care physician with the Third Marine Aircraft Wing, El Toro, CA, 1992. He was head of Occupational Health for the Naval Surface Warfare Center, Indian Head and Dahlgren Division, Indian Head, MD from 1994-1996.

James R. Spears, MD, an orthopedic surgeon, joined the

Who's In The News

James Spears, MD

Robert Trautloff, DO

Paul Utrie, MD

Ellwood Voorhees, MD

Danny Wolfgram, MD

medical staff of Community Memorial Hospital, Oconto. He earned his medical degree from the University of Florida College of Medicine, J. Hillis Miller Health Center, completed an internship at Greenville Hospital System in Greenville, SC and a residency at the Medical University of South Carolina in Charleston. Doctor Spears completed a fellowship at James R. Andrews American Sports Medicine Institute and at AO International in Bern, Switzerland. He is board certified in Orthopedic Surgery, 1991, and is former team physician for the Orlando Magic, Orlando Solar Bears Professional Hockey, the Orlando Cubs, and the 1992 U.S. figure skating championships. He has authored several papers including reports on shoulder problems, knee surgery, little league baseball injuries, and rotator cuff problems. Doctor Spears is a member of the American Orthopaedic Society for Sports Medicine, American Academy of Orthopaedic Surgeons, and American Sports Medicine Fellowship Society.

Robert S. Trautloff, DO, a family practitioner, from the Monroe Clinic of New Glarus, was appointed clinical assistant professor in medicine for the University of Wisconsin Medical School. Doctor Trautloff earned his medical degree from Kirksville College of Osteopathic Medicine, Kirksville, MO, and completed his residency and internship in internal medicine at The Cleveland Clinic, Cleveland, OH. The appointment with UW Medical School is for three years.

Paul C. Utrie, MD, a board certified internal medicine physician with specialties in rheumatology, arthritis and musculoskeletal diseases, joined the medical staff of Prevea Clinic, Beaumont. He earned his medical degree from the University of Wisconsin Medical School and completed his residency and fellowship programs at the University of Iowa Hospital and Clinics, Iowa City.

Manuel L. Vivero, MD, a pediatrician on staff at Lakeland Medical Center, was named recipient of the Pediatrics Review and Education Program Award from the American Academy of Pediatrics. This award recognizes fellows of the academy who have earned at least 150 approved continuing medical education credits over three consecutive years, including a minimum of 75 credit hours specifically in PREP educational programs. He earned his medical degree from the University of the East in the Philippines, and completed an internship and residency at Montefione Medical Center, Albert Einstein College, NY, NY.

Ellwood G. Voorhees, MD, a general surgeon, joined the medical staff of Krohn Clinic and Black River Memorial Hospital. He earned his medical degree from Loma Linda University School of Medicine at Loma Linda, CA. Doctor Voorhees completed his internship at Loma Linda and residency at the Walter Reed Army Medical Center in Washington, DC. He is board certified by the American Board of Surgery and is a fellow of the American College of Surgeons. Doctor Voorhees was a major in the U.S. Army and chief of general surgery at the Nuremberg Army Hospital in Nuremberg, Germany, from 1979 to 1982.

Danny A. Wolfgram, MD, a family physician with a specialty in sports medicine, joined the medical staff of Prevea's Ashwaubenon site. He earned his medical degree from the University of Minnesota, and completed his residency and a fellowship at Hennepin County Medical Center in Minneapolis. He is a member of the American Academy of Family Practice and the American College of Sports Medicine.

John Yang, MD, a family physician, joined the medical staff of All Saints Medical Group. He earned his medical degree from the University of Washington School of Medicine, Seattle. Doctor Yang completed his residency in family practice at St. Michael Hospital, Milwaukee. He is board eligible in family practice.

Welcome New Members

The physicians and medical students listed below were recently elected to SMS membership by their county medical societies. We are pleased to welcome them to the SMS.

Brown
David E. Bertler, MD
Loren C. Fuglestad, MD
Noreen R. King, MD
Mitchell W. Manthey, MD
Richard K. McNutt, MD
James R. Spears, MD
Danny A. Wolfgram, MD

Dane
Salman Ahmad
Sherwin F. Attai
Lon J. Augdahl, MD
Elizabeth L. Bahn
Jason V. Baker
Erica L. Berger
Tony B. Borboa, Jr.
Cenon M. Buencamino, MD
Thu T. Bui
Jacqueline M. Cale
Melissa J. Chell
Lisa E. Connery, MD
Jennifer L. Derenne
Mehul Doshi
John B. Feole, MD
Sara Fleet
Chris Garces
Ashkan Ghavami
Mohammed Ghouse, MD
Richard D. Gregory, MD
Amy Jo Haavisto
Steve Hagen
Matthew F. Hansman, MD
Amy L. Herbst, MD
Jeffrey M. Keil, MD
Tagreed Khalaf
Tony Kille
Cara R. Killgore
Troy Kleist
Paul Kwon
Henry J. Lewis, MD
Jeffrey L. Lyman, MD
Jackson C. Ma
Tony Mammen
Megan E. McClymonds
Heather Mewhorter
Lorrie Miech
Wendy L. Molaska
Thomas J. O'Brien, MD
David K. Peters, MD
Michelle Seifert
Bruce R. Selman, MD
Abdul R. Shamsi
Robert N. Sinha, MD
Scott Skibo
Michelle Spring
Matt Swelstad
John E. Temprano, MD
Richard L. Tower, II
David Vanschyndel
Deborah Wax
Graham Winke
James N. Worledge, MD
David T. Yang, MD
Floriane R. D'Oleire, MD

Green
Stephen M. Bejvan, MD

Milwaukee
John O. Chamberlain, MD
Glenn H. Franke, MD
Robert J. Goldberger, MD
Thomas Pelino, DO
Robert F. Madden, MD
Thomas G. Samter, MD
Richard M. Clifford, MD
Wess R. Vogt, MD
Jesus L. Borrillo, MD
Arnavaz Dua, MD
Brian S. Lambert, MD
Michael J. Schwabe, MD
Spencer Hugh Wang, MD
Anita Anderson
Philip A. Bannor
Theresa Stolz Cafaro
Nancy Csizmadia
Ronald P. Guritzky
Cesar M. Hernando
Jason W. Jurva
Kris N. Atzeff
Lori Lea Batchelder
Young KYU Cho
Gregory D. Gramstad
Magda M. Hennes
Minh C. Hoang
Andrew M. Knoernschild
Holly A. Leider
Mark W. Lodes
John S. Maul
Michael C. Pickart, MD
Mir I. Qurashi
Vishala G. Reddy
Shelli M. Seebruch, MD
Henry Liu
Allison M. Macius
Jennifer Peterson
Leandrea S. Prosen, MD
Radhika P. Raj
Sara J. Schofield
Aditi Sharangpani
Anjna Shrivastava
Christopher P. Sobczak, MD
Nicholas Stephan
Michael P. Wenzel
Jaswinder K. Sidhu
Jill M. Spiekerman, MD
Susan S. Wang, MD
Deanna D. Vander Plas
Daniel J. DeBehnke, MD
Sara K. Doster, MD
Kurt J. Ehlert, MD
M. Rosalie Hogan, MD
Kathryn Kiyono, MD
John E. Pappenheim, MD
Thulasiraman P. Ravichandran, MD
Ramuhalli C. Srivyas, MD
Thomas F. Urban, MD

Racine
Ronald L. Smits, MD
Ned S. Mejalli, MD
Richard R. Clark, MD

Rock
Pawel Olszewski, MD
Abraham R. Rodriquez, MD

Sauk
Craig N. Saltzgiver, MD
Eleanor O. Vita, MD

Sheboygan
Gregory H. McKinnis, MD
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Charles H. Miller, MD

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Stephen Bullard, MD
Karen Gremminger, MD
Erik Heggland, MD
Walter Howard, MD
Thomas Reinardy, MD
Michael Hiebert, MD
Jeanine Kies, MD
Michael Kim, MD
Peter Martens, MD
Todd Vanye, MD

AMA Awards

The Wisconsin Physicians listed below recently earned AMA Physicians's Recognition Awards. They have distinguished themselves and their profession by their commitment to continuing education, and the SMS offers them its congratulations. The * indicates members of the SMS.

*Arnold, Sara
*Budzak, Kathryn S.
Desai, Shobha P.
*Isensee, Susan N.
*Janowak, Michael C.
*Jennings, Richard P.
*Junig, Jeffrey T.
*Long, Gregory L.
*Lukasek, Edward O.
*Novsam, Ned R.
*Odulio, Teofilo O.
*Pederson, John F.
*Phillips, David S.
*Przlomski, Andrew T.
*Shabino, Charles L.
Wasiljew, Bohdan K.
*Wedro, Benjamin C.

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Guest Editorial

Tell Your Patients to Stop Smoking!

by Joseph N. Blustein, MD, Madison

Physicians are in a unique position to help smokers quit. Smokers represent over 25% of patients coming in for office visits and more than 70% of smokers see a physician each year. Seventy percent of smokers want to quit and have made one or more serious attempts at doing so. Smokers view their doctor's advice as a key motivator for stopping. Unfortunately, too many of us miss the opportunity and do not recommend smoking cessation to our patients.

Only about 50% of current smokers report having ever been asked about their smoking status or advised to quit. A much smaller number has been given effective advice on how to successfully quit smoking. Our reluctance to intervene on behalf of our patients is due to multiple factors including: time constraints, perceived lack of skills in this area, frustration over a low success rate, and a belief that it is not part of our professional role.

The Agency for Health Care Policy and Research (AHCPR), in their Clinical Practice Guidelines Number 18, offer strategies for instituting an effective anti-smoking campaign in every practice setting. Essential is providing a brief but effective cessation intervention for all tobacco users at each clinical visit. Institutional changes are needed to ensure proper identification for all tobacco-using patients and to allow physicians the time to deliver a required brief intervention. The amount of openness and genuine caring will determine the power of the results. The intervention itself is therapeutic and even those smokers reluctant to quit will be treated at every office visit.

The best way to help smokers quit is to ask, advise and assist. Ask **every** patient at **every** visit about tobacco use. Including tobacco use as a vital sign can be an effective office-wide strategy. Advise tobacco users in a clear, strong and personalized manner to quit. Pointing out the health risks to your patient as well as the risks they are exposing other members of their family to and making clear your willingness to help them quit will help. Assist your patients with a plan designed for success, using proven strategies to make their quitting permanent. These strategies include setting a definite total abstinence quit date within two weeks; removing all tobacco products from home, car and work; reviewing previous quit attempts and discussing what worked and what led to relapse; recommending the avoidance of alcohol during the early stages; prescribing adequate nicotine replacement and bupropion; and scheduling timely follow up, either in person or by phone, to congratulate success or request a recommitment for total abstinence.

There is support to make smoking cessation a regular part of your clinical practice. The Smoking Cessation Clinical Practice Guidelines and Consumer Guide are available at no charge through AHCPR by calling (800) 358-9295. These documents can be viewed and downloaded from the AHCPR web site at: **http://www.ahcpr.gov:80/guide/smokepcc.htm** for the clinical guidelines and from the National Library of Medicine web site at: **http://www.nlm.nih.gov** for the consumer guide.

Let us do what we can to improve the health of our patients by telling them to stop smoking.

Joseph Blustein, MD, is a WMJ Editorial Board member and Medical Director with MetaStar. Reprint request to: Joseph N. Blustein, MD, MetaStar, 2909 Landmark Place, Madison, WI 53713.

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Guest Editorial

Do the Right Thing for Our Kids

by John E. Mielke, MD

A major goal for the national program "Healthy People 2000" is to: **Increase the life span of Americans.** Wisconsin, along with 16 other states, is at odds with this goal because it raises a tobacco farm crop which contributes to:

1. 60 newly-addicted Wisconsin children every day resulting in half dying prematurely.
2. More than 7,000 Wisconsin deaths per year.
3. Over 80,000 lost years of life in Wisconsin.
4. A one-billion dollar direct and indirect cost burden per year for Wisconsin residents.

Tobacco use nationally causes:

1. A 20% exacerbation of asthmatic symptoms in children.
2. Over 150,000 lower respiratory infections per year in young children.
3. Over 400,000 deaths per year.*

Despite these gruesome figures, 100-million dollars is spent annually in Wisconsin to promote this addictive substance. This spending is largely uncontested.

The etiologic culprit is: **Tobacco!**

Sales Tax Increase can Make a Difference

A St. Norbert College statewide survey revealed a 73% popular support for a 56-cent increase in the cigarette excise tax. Based on this poll and the fact that youth are price sensitive, our state government, by its taxing authority, has within its grasp the single best tool to decrease the consumption of tobacco by our youth. Furthermore, they have the prerogative to commit significant portion of these tax dollars for marketing and community prevention and education programs. The National Advisory Committee on Tobacco Policy and Public Health chaired by Koop/Kessler commission supports a significant increase in tobacco taxes up to $2.00 per pack.

Our state government can and should help prevent the tobacco tragedy! The Wisconsin cigarette excise tax was raised 15-cents in this biennium budget. This increase will raise over 50-million dollars per year in new tax revenues. However, only two-million of this new revenue is targeted for positive antismoking measures.

Most of our cigarette excise tax money goes for general revenue purposes. Allocation of cigarette tax dollar resources in this manner is not right, is opportunistically very short sighted, is not fair to our children and offers little counterbalance to the huge state marketing budget of the tobacco companies.

It is therefore being proposed to our legislators that a large portion of the cigarette excise tax money be allocated for:

1. Creation of positive youth-oriented marketing messages.
2. Creation of community prevention and education programs for all our citizens.
3. Creation of a structure for independent research and outcomes measurement for the money allocated to antismoking efforts.
4. Creation of positive economic incentive programs for both Wisconsin tobacco farmers and small business operators to help them move away from the growing and selling of tobacco and into positive economic ventures that will benefit themselves and all our citizens. Positive incentives for our people will achieve more than punitive measures directed their way.

To put a dent into this epidemic that is affecting our youth, we, as physicians and concerned citizens, need to cry out to our elected officials: **"Do the right thing for our kids."**

*Centers for Disease Control and Prevention

John E. Mielke, MD, is a cardiologist with United Health in Appleton, WI, and serves on the American Heart Association's Public Policy Committee.

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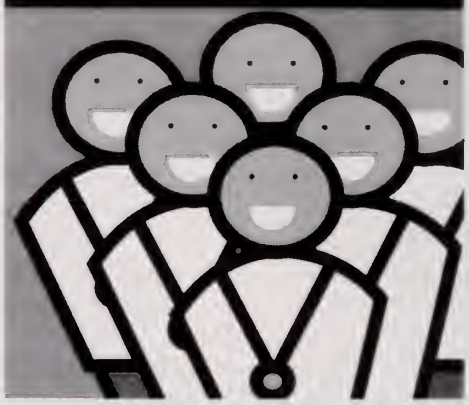

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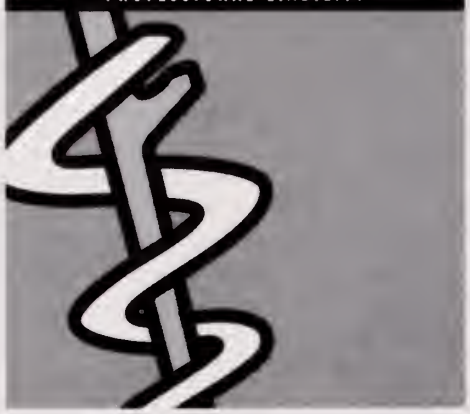

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Guest Editorial

A Brief History of Tobacco

by Jennifer Braun, Madison

In the late fifteenth century, Christopher Columbus sailed westward from Spain hoping to bring back the riches of India. Instead he brought back tobacco. Columbus noted the use of tobacco by the natives of the islands he visited. These islanders, whom he called Indians, smoked tobacco in pipes for ceremonial purposes and as a symbol of goodwill.

The Indians smoked the plant in a Y-shaped pipe, one fork of the pipe being inserted into each nostril. The pipe was called a *tabaco*, and probably this is where tobacco got its name. Some pipes were made of baked clay, others of wood, others of soft colorful rocks, many of which were artistically carved.

In some areas, Indians smoked tobacco rolled in the husks of corn. Later, the smoking of tobacco in paper wrappers as small cigars or cigarettes originated in Spain in the seventeenth century. From Spain, cigarettes spread to Turkey and Russia and then to France and England. Soldiers who had served in Eastern Europe during the Crimean War brought them back and introduced them to Europe.

The most widespread and most ancient use of tobacco today is for smoking. Columbus, however, noted that some Indians sniffed powdered tobacco through a tube. This form of tobacco was named snuff by the Dutch who promoted its use in Europe. Snuff was thought to have healing powers and was prescribed to "stop bleeding and to clear the head."

Snuff, was popular in Europe for centuries with all levels of society. It was carried around in fancy snuff boxes. A small quantity was held between the fingertips and quickly inhaled in each nostril. This habit is still practiced in other parts of the world but snuff was never widely used in the U.S.

Chewing tobacco, which consists of tobacco leaves mixed with molasses, was developed in this country and for years was used extensively. Fancy spittoons were placed in strategic locations for those who indulged in this habit. But while one can still see cans of chewing tobacco in stores, its use has declined considerably, the spittoon has disappeared and is now considered a collector's item. The current use of chewing tobacco averages about one-half pound per person per year.

Crude cigars made of rolled tobacco leaves were smoked by natives of Cuba when the island was first visited by Columbus. Spanish and Portuguese sailors then started the making of cigars in their countries. Ask a cigar smoker and he will tell you that cigar smoking is the only real and civilized way to enjoy tobacco. Good cigars, however, are expensive, and their use decreased as other form of tobacco use became more popular and less costly. Initially, cigars were replaced by snuff, then pipes and finally cigarettes. In this country, cigar smoking declined sharply between 1920 and 1930 when, as a result of World War I, cigarette smoking began to increase.

Cigarette smoking prior to World War I was infrequent. A few brands were marketed but most smokers "rolled their own." Skill in rolling a good cigarette, particularly with one hand, was considered an art and a proud accomplishment. One could also use a cigarette roller. This was a simple box in which one placed a sheet of cigarette paper and an amount of tobacco. One then simply shut the box and voila, a cigarette popped out of a slit in the top. A quick lick of saliva and the cigarette was ready for use.

Gradually the distribution and use of tobacco became worldwide, reaching even remote, undeveloped regions of Africa, South America and Asia. In my youth in India I learned that almost all the natives -- men, women and even children in some of the primitive tribes, smoke tobacco. It is often rolled in a dried leaf secured with a tiny sliver of wood called a *beedi*. I saw men and women who begged in order to eat still able to eke out a few coins to buy *beedis*. Otherwise, they rolled up their own from discarded cigarette butts. Such widespread distribution and use of a plant which until the past few centuries was limited to North America is an amazing phenomenon.

In some of the mountainous regions of India tobacco is used for medicinal purposes. It has many uses in folk medicine. A drop of tobacco juice is squirted in the ear to cure deafness; a young leaf is placed on the head to cure headache; the juice is applied to sunburns; animals bathed in

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Ms. Braun is a freelance writer living in Madison. She has recently completed a novel about her experiences growing up in Calcutta.

tobacco water will be rid of fleas. One can choose from a variety of tobacco-containing ointments, concoctions, powders or leaves for burns, wounds, cancers, sciatica, diseases of the liver, of the spleen, of the womb, worms, colic, warts, corns, and mad dog bites.

In the West it is doubtful if tobacco ever had any medicinal value. Cigarette smoking is the primary use of tobacco and perhaps being part of a family in which there were smokers helped produce other smokers and users of tobacco. A lot of young people believe that smoking is "cool" and take up the habit. Perhaps advertising has a lot to do with it.

Some years ago an ad encouraged one to reach for a cigarette instead of candy or chocolate. This was a clever slogan because most people have a fear of getting fat and know that sweets are fattening. I'm told that sales of that particular brand of cigarette tripled within a year.

A greater demand for cigarettes followed the acceptance of smoking by women. Cigarette smoking by women did not become popular until the 1920s and 1930s, prior to that time, smoking by women in public was almost unknown. Skillful and intensive advertising made smoking socially acceptable and often associated smoking with characteristics that particularly appeal to young women: romance, independence, glamour, and social success.

The tobacco plant was given the botanical name *nicotiana* in honor of Jean Nicot, the French Ambassador to Portugal, who is said to have sent seeds to the Queen of France, Catherine de' Medici. Tobacco, of course, is high in nicotine and nicotine is the principal reason why people become addicted to tobacco. It also explains why so many different kinds of insects invade the tobacco fields: insects sampling tobacco get the narcotic effect, as well. This means that tobacco crops require an unusual amount of spraying. Some of the insecticides, fumigants, fertilizers, adsorbents, etc., used by growers and the industry are: Lead Arsenate, Nitrobenzene, Chlorine, Texaphene, Dichloropropone, Diethylene, Boron, Bentonite, Chlordane, Methaldehyde, Parathira.

Filter-tip cigarettes were first produced about 1950. In that year, 0.5% of cigarettes sold were filter tip. Now most of the cigarettes produced are filter-tipped; these are believed to remove some if not most of the harmful ingredients in cigarette smoke. Filters actually do remove some of the tar and other harmful ingredients. But none really protects smokers from lung cancer, emphysema, cardiovascular diseases, and other ailments that are known to occur more frequently among cigarette smokers than among non-smokers.

Today smoking is banned in almost all public buildings, domestic airline flights, and many restaurants because second-hand smoke has been found to be hazardous and is dose dependant similar to the risks of direct inhaling of cigarette smoke.

Tobacco has been a part of the social culture for centuries. It is not likely that it will be eradicated entirely from use, but the steps physicians take today to educate and help their patients quit smoking can make a difference in the lives and health of the community tomorrow.

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Tobacco Update 1997: "Global Settlement" On Hold

by Marc Kennedy, Special to WMJ

To Michael Fiore, MD, the biggest story in the last year was the so-called global settlement between the tobacco industry and 40 state attorneys general and assorted public health advocates. The proposal calls for the industry to provide $368.5 million over 25 years to compensate victims and to create and promote educational programs to prevent children from smoking. Though Fiore has misgivings about many components of this plan, and does not advocate acceptance in its current form, he sees one critically im-portant change the proposal signifies.

"The tobacco industry is beginning to acknowledge the tremendous injury and death tobacco is responsible for, and the extraordinary addictiveness of the product they are promoting," says Fiore, Director of the Center for Tobacco Research and Intervention at the University of Wisconsin Medical School, and a recognized national expert in smoking cessation.

"This change is going to be a most important step in making tobacco use part of our past."

However, he estimates a significant issue in the coming year — or, perhaps, years — could be whether Congress will adopt the proposal, and whether such a deal in its current form is a victory or an accommodation.

"It's unclear whether there will be a settlement," he added. "Based on the components, there is debate over whether it makes sense going ahead with the deal at all.

"I'm not an economist or lawyer or expert on the proposed agreement. But concerning public health, clearly if you look at the comments of Koop and Kessler, the agreement is flawed. Whether it is flawed to the extent that we need to start over or try to salvage what has been proposed so far, is not certain."

Fiore is scarcely alone in his criticism that the proposal lets the tobacco industry off too easy. He alluded to the reservations of the global proposal by former Surgeon General C. Everett Koop, MD, and former head of the FDA David Kessler. Others quickly voiced their concerns as well. In a recent *Business Week* editorial, Robert Kuttner wrote that a cap on litigation — part of the proposed deal — would hinder future efforts to make the industry accountable.

"It was the litigation that uncovered the most damaging documents on what the industry knew and what it concealed. Courtroom sympathy is shifting dramatically to plaintiffs. [Last summer] ...a Florida trial judge ruled that the industry's favorite defense — that the public was well aware of the hazards of smoking — could not be used in that state's Medicaid reimbursement."

In addition, limiting the amount of compensation the industry would pay according to the agreement would fall far short of addressing the costs of smoking. Jeffrey E. Harris, MD, a Massachusetts Institute of Technology economist, testified to the Senate that the costs of smoking-related illness were $88 billion for 1995 alone, while the deal covers only about $8 billion a year, adjusted for inflation. In addition, the $500 million earmarked for smoking education annually is dwarfed by the $6 billion the industry spends each year to promote its tobacco products, tobacco opponents add.

"As the anti-tobacco side took a closer look at the details, one supporter after another has defected," Kuttner wrote in *Business Week*.

"Apart from its details, the deal was dubious all along on two key grounds of process. The parties got together in secret negotiations to settle a major issue of public health policy. Congress, a bystander, was supposed to sign on the dotted line. This was not exactly what the framers of the Constitution had in mind, nor is it the role of Congress fancies for itself...

"Second, it is bizarre to design a product liability cap for one industry. The Supreme Court recently threw out the proposed mass settlement of asbestos claims, on the grounds that one group of

Cigar Smoking Trendy, but Clouds the Facts

by Jeremy Pittenger, Associate Editor

Stained teeth. Bad breath. Emphysema. Lung cancer. Welcome to the wonderful world of cigar smoking. It's the world where consumers are told cigars are "safer" and "more socially acceptable" than other tobacco products. A world where we are constantly bombarded with images of Hollywood celebrities, successful business executives, and even professional athletes proudly puffing away on cigars.

No doubt, cigars have become a major business venture. We have seen the emergence of cigar speciality stores, glossy magazines catering to cigar smokers, cigar clubs and cigar sampling parties. Indeed, it has become *the* trend of the 1990s. But, take away all the trend-setting elements and you are left with a dangerous, addictive and deadly product.

Cigars lead to exposure of harmful tars and addictive nicotine. Cigar smoking has been associated with cancer of the throat, mouth, esophagus, and lungs, as well as with heart attacks, stroke, and lung disease. In fact, cigar smokers are two to three times more likely to die of lung cancer than nonsmokers.

Although the general "rule" is to not inhale while smoking cigars, those who switch from cigarettes to cigars may unintentionally inhale. In such cases, cigar smokers are at greater risk of death from cancer of the mouth and throat than nonsmokers. However, those who refrain from inhaling are not safe either. The cigar juices and cigar smoke increase the risk of oral and pharyngeal cancer. Nicotine from cigars can actually be absorbed through the lining of the mouth and absorbed much faster under your tongue.

Incredibly, cigar smokers may spend up to an hour smoking one cigar that may contain as much tobacco as a whole pack of cigarettes. Cigars can also have up to 40 times the nicotine and tar of cigarettes. Because more nicotine is absorbed through cigar smoking, it is much harder to quit smoking cigars than cigarettes. According to the American Cancer Society, mortality rates from cancer of the oral cavity, larnyx, pharynx, and espohagus are about equal in users of cigars, cigarettes and even pipes.

Second-hand smoke emanating from cigars is at least as carcinogenic as the smoke from cigarettes. In addition, cigars are the major source of second-hand smoke, containing over 4,000 chemicals – some which are poisonous and others that are cancerous. Clearly, it is best to recommend that patients stop smoking tobacco products altogether rather than switch to a so-called safer tobacco alternative. This is one trend we can all do without.

negotiators could not properly abrogate the rights of those not at the table."

In this light, it's little wonder big tobacco was hungry to make a deal right away, before more people had a chance to chew over the facts a little longer. Whatever form the bill ultimately takes, it will likely need to undergo numerous revisions before the legislature ever even allows it on the plate.

Industry Admits Addiction

Not everything was negative about the proposed deal, critics admit. Fiore points out that in its haste to try to make a deal that will secure them a liability cap and profitable future, Big Tobacco has been willing to give up more than money — it has had to admit the degree of addiction associated with nicotine, and their culpability in covering up knowledge of that fact over the last 30 years.

"To me, the important aspect of the proposal is that it has changed how we discuss the issues, because of what the tobacco industry is owning up to. I focus on helping adults who are trying to quit, so this aspect of acknowledgment is very important," explains Fiore.

"Admitting the nature of this addictiveness challenges the notion that smoking is just a bad habit; that people should be able to quit on their own. This acknowledgment by the tobacco industry puts more importance on the need to treat it as a medical problem, not a personality flaw. This offers more hope for patients addicted to nicotine and the clinicians attempting to treat them."

Treatment as Important as Prevention

Concerning treatment for smokers, however, Fiore finds fault with the proposal.

"I've been surprised and disappointed that the so-called settlement spent so little time addressing the needs of the 50 million Americans who already smoke," he says. "These people that are already addicted are in effect paying for this settlement with their health. None of the efforts of the current agreement help them quit smoking. From my perspective as a clinician, it's surprising there is such a lack of attention toward this critical part of the equation. The only way we're going to deal with it as a public health issue is to get current smokers to quit, as well as keeping kids from starting. We should continue to focus on preventing children from starting to smoke, but not at the exclusion of adults."

"Admitting the nature of this addictiveness challenges the notion that smoking is just a bad habit; that people should be able to quit on their own. This acknowledgment by the tobacco industry puts more importance on the need to treat it as a medical problem, not a personality flaw."

In this regard, Fiore and many colleagues across the nation are poised to embark on one of the most ambitious smoking cessation projects ever conducted.

"We are discussing the creation of a partnership with the Robert Wood Johnson Foundation," explains Fiore.

"They approached CTRI about collaborating on a large new initiative to tie in smoking cessation treatments with managed care organizations. The idea would be to test innovative ways to address tobacco addiction within the existing systems of health care delivery. This would involve taking the federal Agency for Health Care Policy and Research (AHCPR) guidelines and implementing them into 'real world' HMO settings to see which ones work best."

New Treatment on the Horizon

A new option for helping smokers quit is being tested now at sites around the country, including UW-Madison: a drug called Zyban.

"This is an exciting treatment option because it is the first non-nicotine alternative (a pill) used to help people stop smoking," says Fiore.

Dopaminergic and noradrenergic receptors in the brain contribute to tobacco addiction. When a smoker quits, Fiore explains, the levels of these receptors decline, helping to produce withdrawal symptoms. Zyban diminishes some of these symptoms. While this drug is promising, Fiore cautions that the new therapy remains one of many tactics smokers can use to help them kick the habit.

"Zyban is another weapon to help smokers quit; it is not a magic bullet. But it is an important step."

Another approach is examining socioeconomic aspects of smoking cessation.

"For the first time, we are conducting a study that includes inner-city minority smokers in Milwaukee as well as smokers in Madison, and evaluating what treatments are most effective," says Fiore.

"Dr. Tom Jackson at the UW-Milwaukee campus is collaborating with study coordinator, Professor Tim Baker of CTRI, on this unique project."

He adds that while incidence of teen smoking is highest among whites, tobacco use rises sharply for adult blacks.

Prevention Still a Key

While treating smokers today remains a primary focus for Fiore, the CTRI has dedicated more resources to preventing children from starting to smoke.

"Reaching youths throughout Wisconsin and the adults that come into contact with them are a priority. There have been responses from communities throughout the state that we need to do more to combat the increasing rates of children who smoke. In Dane County, for instance, we have some of the youngest smokers in the state and nation." (Please see related articles, *Tobacco Use by Kids Increases* on page 23 and *Enforcement of Minor Tobacco Laws: Wisconsin, 1996*, page 37.)

Smoking is on the rise among youngsters under 18, according to the American Cancer Society, increasing 30% in the last six years. The global tobacco settlement would partially address these issues — by eliminating cartoon characters that appeal to the young, such as Joe Camel — but Fiore believes more must be done.

"Clearly, advertising has to be restricted as part of any deal," says Fiore. "There has been minimal movement by the industry so far; Joe Camel has retired. But many magazine and billboards remain. There is a new market among the Gen X crowd that is geared toward young adults and older teens."

Other issues to be addressed include increasing the cost of cigarettes enough to limit access to children, enforcing the law to demand identification for those under 27 who purchase tobacco products.

"Whatever we can do to denormalize tobacco use and smoking behavior helps to limit new smokers.

"Data suggest that the 15 cent increase of excise tax should help, but it will have less of an impact because it is being phased in rather than implemented in one step. The coalition of anti-tobacco advocates wanted an increase of 56 cents a pack, an approach that could have markedly decreased youth smoking," stressed Fiore. (Please see Guest Editorial "Do the Right Thing for Our Kids" on page 22.)

Normalizing Tobacco Use

While anti-smoking advocates and public health officials strive to denormalize cigarette, other forms of tobacco remain popular, namely smokeless tobacco and cigars.

"Cigars are clearly enjoying a renaissance; an unfortunate renewed glamorization and normalization," says Fiore.

"This is entirely the result of the tobacco industry using cigars as one more gateway to tobacco addiction. As they have done in past, the tobacco industry is focusing on a segment in the population that isn't using their product enough, getting them hooked so they can become regular tobacco users. Meanwhile, smokeless tobacco makers continue to target teens."

In another attempt to make smoking more socially acceptable, Philip Morris recently announced that it is planning to test a microelectronic cigarette holder that eliminates the smoke and ashes from the end of cigarettes. The battery-powered "smoking system" is a beeper-sized 4-ounce box that holds a specially-designed cigarette that only burns when puffed. Smokers would lift the device containing the cigarette to their lips each time they wanted to take a drag, be it once a minute or once an hour. It would be "like smoking a kazoo" reported the *New York Times*.

Richard A. Daynard, chairman of the Tobacco Products Liability Project at the Northeastern University School of Law in Boston, an anti-tobacco group, dismissed it as "clearly another nicotine-delivery device." He added "who would use an expensive and cumbersome thing like this if they weren't hooked? There is something grim and desperate about it. This is hardly the Marlboro Man, getting on his horse and checking the battery."

The device would eliminate 90% of second-hand smoke. Smokers would still inhale the same 3-milligrams of tar and .2-milligrams of nicotine that is in conventional ultralight cigarettes.

Advice for Physicians

To Wisconsin physicians, Fiore emphasizes the importance of their role in helping patients quit and in preventing them from getting started.

"As health care clinicians, we are in a unique position to help influence our patients to make healthy decisions in their lives. If a patient is identified as a tobacco user, take a few minutes every time you see them to help them quit; if they are in the process of quitting, offer encouragement."

For more information or a free doctors' quick reference guide for clinicians about helping patients stop smoking or preventing them from starting, call the AHCPR at (800) 358-9295 or visit their World Wide Web site at: http://www.ahcpr.gov/guide/. WISMED, the SMS web site (**www.wismed.com**) also offers links to tobacco-related sites for both physicians and their patients. (See the related Guest Editorial, *Tell Your Patients to Stop Smoking!* by Joseph Blustein, MD, on page 14.)

Tobacco Update 1997: Tobacco Use by Kids Increases

by Marc Kennedy, Special to WMJ

It's a drag to most parents and public health advocates, but the statistics burn bright. Despite local, state and national efforts to curb smoking by adolescents, tobacco use among minors is increasing. The greatest surge is by younger smokers: from 1991-1994, 8th graders who smoke rose 30%, compared to 22% for 10th graders, according to the American Cancer Society.

Today, more than three million children and adolescents under age 18 smoke cigarettes, while one million adolescent boys use smokeless tobacco, reports the U.S. Department of Health and Human Services. These statistics have smoking prevention advocates scratching their heads and digging in their heels as they doggedly try to find ways of reversing this disturbing trend.

But what's behind this increase of tobacco use? It's not as though kids don't understand that smoking is bad for their health.

"Sure they do," says Ann Schensky, Education and Outreach Program Leader with the Center for Tobacco Research and Intervention at the UW Medical School in Madison.

"The kids I talk to who smoke know it isn't good for them. But they don't think it will hurt them until they are middle-aged. At this stage in their lives, some of these kids would rather be dead than be 40 anyway. The long-term health effects mean nothing to these kids; they are invincible.

"To make an impact, you have to look at why they smoke, and try to intervene in ways that relate to them. Unfortunately for some kids, it's too late."

In addition to giving presentations on smoking in the schools, Schensky counsels teens who are already long-term smokers but who are trying to quit.

"After smoking for several years, kids 14-15 years old are noticing that they are hooked.

> *"After smoking for several years, kids 14–15 years old are noticing that they are hooked. They thought they could stop anytime they wanted. Kids vastly overestimate their ability to stop smoking and greatly underestimate the addictiveness of nicotine."*
> *– Ann Schensky*

These kids never thought they would become addicted to nicotine. They all thought they could stop anytime they wanted. That's one of the problems. Kids vastly overestimate their ability to stop smoking and greatly underestimate the addictiveness of nicotine."

After as little as one pack of cigarettes, the body is already beginning to crave nicotine, Schensky explains.

"We need to convince them that the younger they start, the greater the addiction and dose response. The earlier the onset of problems. That asthma is high in kids who smoke, or whose parents smoke.

Tobacco Use by Children and Adolescents

- More than 3 million children and adolescents smoke cigarettes and 1 million adolescent boys use smokeless tobacco.
- 1 in 4 adolescents have smoked a whole cigarette by age 13.
- 1 in 3 adolescents in the U.S. uses tobacco by age 18.
- More than 6,000 young people smoke a cigarette for the first time each day.
- More than 3,000 young people become regular smokers each day. One-third of these 1 million kids who become smokers each year will eventually die from smoking-related disease.
- Tobacco use among minors is increasing. The greatest rise is among the youngest smokers: Between 1991 and 1994, smoking by 8th graders increased 30%, while smoking by 10th graders increased 22%.
- 90% of new smokers are children and teens.
- The earlier a person begins smoking, the longer they will smoke, the greater the risk of nicotine dependence and the heavier the daily consumption of cigarettes.
- Nicotine is a "training wheel" or "gateway" drug. Youth 12 to 17 years old who had smoked in the past 30 days were:
  - 3 times more likely to have consumed alcohol
  - 8 times more likely to have smoked marijuana, and
  - 22 times more likely to have used cocaine than those who had not smoked cigarettes.

"We point out that particularly for teenage girls, smoking can seriously affect their health because their lungs have not yet fully developed. We emphasize that these effects start appearing now, not in 30 or 40 years."

That was Then, This is Now

Messages about immediate drawbacks of tobacco use are most likely to get teens' attention. The common-sense information about the unhealthy effects of smoking seem to work well with younger kids — often to the point that they routinely harangue their smoking parents of the dangers of tobacco. But when they reach 5th or 6th grades, things start to change.

"You begin to see views shift when they get to middle school," says Schensky. "They start thinking they are immortal, begin to buck parental authority, and start finding ways to reject being a 'good' kid.

"That's when decisions are made about lifestyle choices, and often you can't tell them anything, like don't walk in front of a moving car even though it makes incredible sense. They are no longer little kids. This is something as educators we have to realize, and we have to be willing to take more of a grown-up approach, and to make it relevant to them."

For example, Schensky and her colleagues find they get kids' attention when pointing out the short-term negative aspects of smoking: it dulls hair, colors teeth; it gives you bad breath and makes you smell; it burns holes in clothes; and, it's expensive.

"I also ask kids if they know of anyone, a friend, a relative, who has died from or is suffering from lung cancer, emphysema, or heart disease brought on by smoking. This turns a few heads."

Of course, there are always the stories about the great-grandfather who lived to be 93 and smoked two packs of Camel non-filters every day.

"To that I reply, 'yes, but what about the person who died of lung cancer at 45?' I ask the kids if they want to gamble on which one of those people they think they are going to end up being."

Image is Everything

Current statistics show that the highest incidence of smoking among minors are white, with blacks the lowest. This trend is reversed as children become young adults.

"Minority kids seem to have much more respect for parental wishes than white kids," adds Schensky. "For example, many black children say they don't smoke because their moms will kick their butts if they find out.

"Image seems to mean more to white teens than to black teens," she says. "White teenage girls are much more influenced by the supermodel look, like Kate Moss. Young, very thin. Plus there is a lot of smoking in movies featuring rebellious Gen X icons who attract teen fans."

Combating the allure of such appealing role models can be a daunting task. Schensky says it will take a community-wide push involving schools and parents if any efforts are to succeed in limiting the number of children who begin smoking.

Wisconsin high schools have adopted an "extracurricular activity code" that applies to debate, drama, music as well as athletics.

"It's 'three strikes and you're out' starting when you enter high school. Three transgressions — including tobacco use — will get a

student banned from all extracurricular activities until they graduate, even if all three come in their first year. With the jocks, it's an easier sell, because of the obvious negative affect on performance."

The code tends to keep the so-called "good" kids on the straight and narrow for the most part. Schensky adds that these teens will still be tempted to break the code occasionally, but are much more likely to do so in seclusion, in a car or at a private party where they are less likely to get caught.

"For these 'good kids,' having a cigarette once in a while is a small form of rebellion," she says. "They are not about to screw up grades, sports or other activities. They say, 'I don't smoke dope, I don't drink, I don't cut class, so I have to do something so I'm not a nerd.' To that, I reply 'and having bad breath and stinky clothes doesn't make you a nerd?' "

While teens active in school have incentives to remain tobacco-free, those not involved — referred to as "border kids" — may become drawn toward others who smoke cigarettes, which can become the only prerequisite for joining such a loosely knit group.

"Border kids who smoke often create their own subculture," says Schensky. "For kids who aren't into anything else, this gives them an identity. They feel they belong by merely smoking. They are also the most blatant of teen smokers; they are the ones out in the open, smoking off school property before and after class. They don't have anything to lose, which is part of their persona; the 'rebel without a cause' sort of look."

While the new federal laws make it more difficult for minors to obtain cigarettes, in some ways it adds to the mystique of smoking. Since you have to be older to get tobacco, if you are smoking, obviously, you are securing the stature of an older, more mature person. But because there are few sanctions that limit their smoking, these teens become addicted younger and faster, and begin developing health problems sooner.

"Some kids who become addicted to nicotine will go to extraordinary lengths to address their habit," explains Schensky. "Some use smokeless tobacco during school because it's easier to hide. But then, the kids can't spit. So they end up swallowing the tobacco, which can cause gastrointestinal problems. Also, we have evidence that kids, even girls, put smokeless tobacco paper packs between their toes to obtain the nicotine they need."

It isn't cigarettes and smokeless tobacco alone that kids are using. In 1996, an estimated six million 14 to 19-year-olds reported smoking a cigar during the previous year, according to studies funded by the Robert Wood Johnson Foundation.

Local Control Important

Part of the continuing problem is that tobacco use is still treated as normative behavior; that is, it is not as bad as drinking or using controlled substances.

"Underage smoking used to be a $5 fine; now, it's $55," Schensky says. "Tobacco is beginning to be viewed as community-wide problem, which local clean air ordinances can reflect. Public places should be smoke-free, like restaurants and ball parks. We will send a proposal to the Legislative Council to have them remove preemptive language that will enable communities to adopt ordinances stronger than current state law regarding smoking; to use existing legislation as a floor rather than a ceiling when it comes to tobacco control. This would let communities set their own standards concerning removing cigarette machines, placing tobacco products behind the counter, etc."

While parental involvement is crucial to these local efforts, Schensky says it is all too common for high schoolers to smoke together with parents when inside the house.

"Some kids tell me that the whole family sits around the living room watching TV while smoking. Parents tell them it helps them wind down, to relax. Then kids view it an acceptable way of dealing with stress. They don't see smoking as merely offering short-term relief. The problems are still there when the cigarette's gone. The same with drinking. They assume if they smoke or drink they'll feel better. These types of attitudes start kids on their way to a lifetime reliance on drugs and alcohol that they believe is a valid method to help them get by."

Tobacco is considered a "training wheel" or "gateway" drug that sets the stage for future drug and

alcohol use. Children aged 12 to 17 who had smoked within the last 30 days are three times more likely to have consumed alcohol, eight times more likely to have smoked marijuana and 22 times more likely to have used cocaine than those who had not smoked cigarettes, according to a national household survey on drug use.

Just Say "Know"

One approach that is certain not to work to prevent children from smoking: anything that mentions "peer pressure."

"There is no such thing to teenagers as peer pressure. It doesn't exist," says Schensky. "A teen today does not do anything because their friends are; they do it because he or she wants to do it. When asked, they quickly respond that they have friends who smoke and friends who don't. If I smoke, they say, 'it's my decision.' They want to exert their independence, and won't be told otherwise."

This strident stance extends to other forms of influence, including movies, television and magazine advertising.

"Many girls smoke because they believe that it will help them lose weight, but they will swear up and down that the anorexic models in the magazines they read have no influence on them whatsoever."

The same goes for tobacco advertising in magazines or billboards. "Kids say that this has no effect. Rather than challenge this, I ask them if they think the tobacco industry spends $4- to $6-billion a year, year after year, on strategies that don't work?"

While many magazines directed exclusively at teenagers do not contain tobacco ads, others with large teen audiences do. *Glamour*, with 25% of its readership comprised of girls under age 18, received $6.3 million from tobacco advertising. The same year, *Sports Illustrated* — 33% of its readers are boys under 18 — received $29.9 million, according to a 1991 *JAMA* article.

> *"While parental involvement is crucial to these local efforts, Schensky says it is all too common for high schoolers to smoke together with parents when inside the house."*

"The new *Sports Illustrated* magazine for women is rife with tobacco ads," Schensky adds. Still, she admits that it's hard to get through to teenagers. "They are tired of adults telling them what to do. Perhaps the best approach is to present the facts to them and help them draw their own conclusions. And, it can't be theoretical; it has to be real and in your face.

"Maybe it's time to take a tip from the driver education films of the '60s — the "dead teenager" movies, that attempted to scare kids into slowing down and paying attention when driving. The gorier the better. Maybe that will get their attention and make an impact."

For more information on the Education and Outreach Program at the Center for Tobacco Research and Intervention at the University of Wisconsin Medical School, call (608) 262-8673 or write to CTRI at 7275 Medical Sciences Center, 1300 University Avenue, Madison, WI 53706-1532.

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- The doctor must be either an MD or DO
- Except in unusual circumstances, the service to the community should be uncompensated. (Preference is given to current service over lifetime service.)
- Previous winners of the award are not eligible. (The Medical Society will notify you if the doctor you nominate is a previous winner.)
- **The deadline for submitting nominations is January 1, 1998**

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- Your name and address
- Why you think the doctor deserves to win: What has the doctor done for the community?
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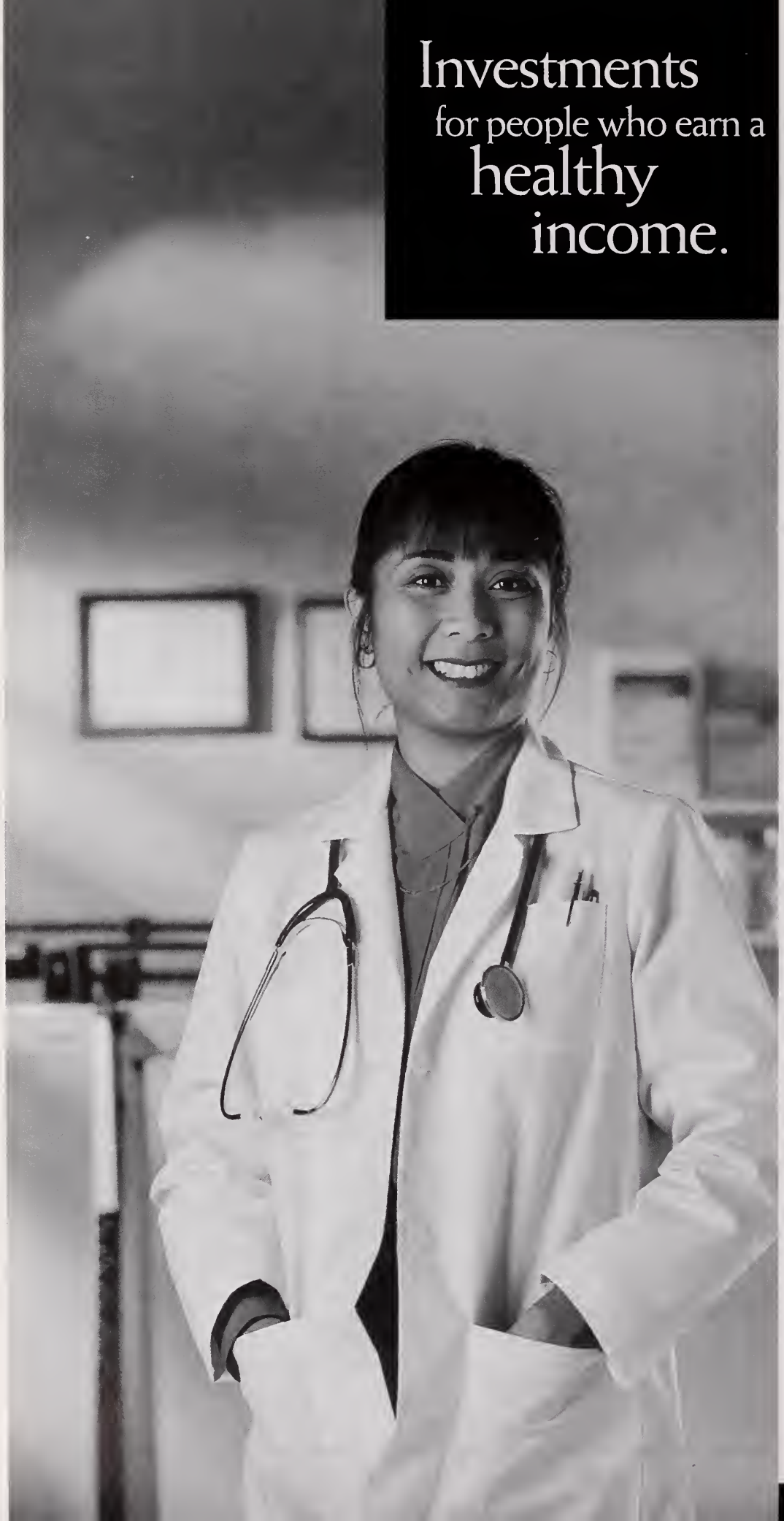

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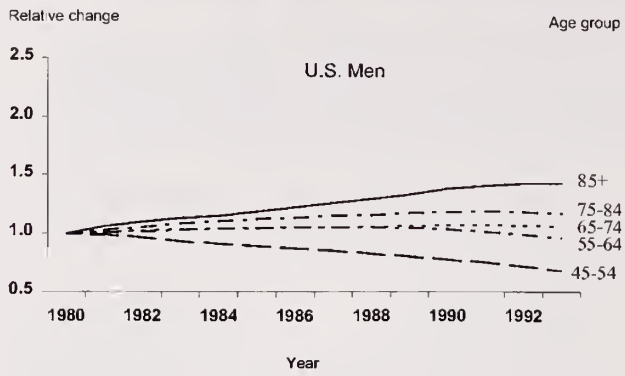

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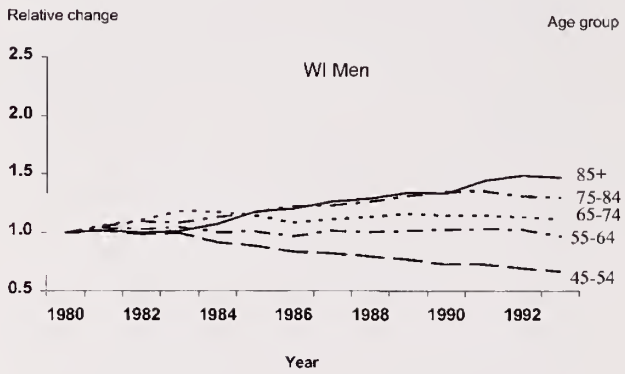

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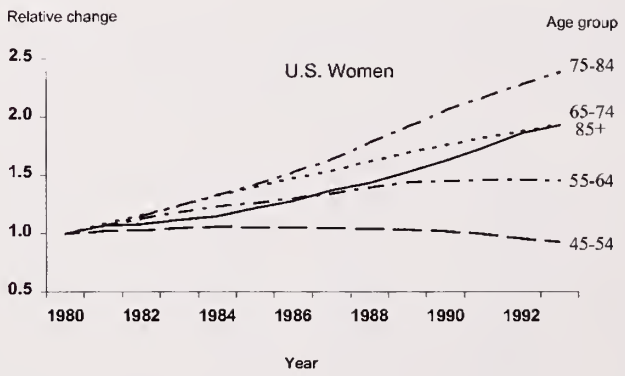

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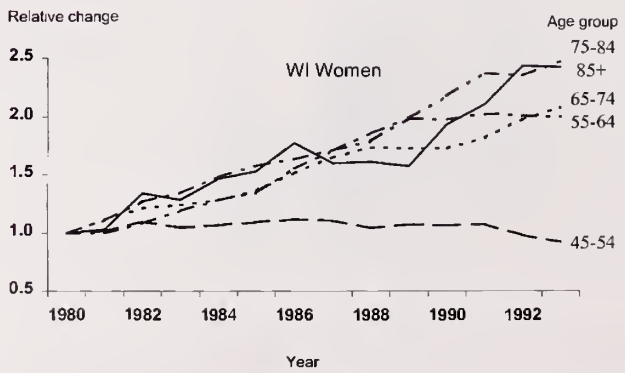

Figure 4

Figure Legend: Trends in lung cancer mortality among men in the U.S. (Figure 1); men in Wisconsin (Figure 2); women in the U.S. (Figure 3); and women in Wisconsin (Figure 4). The lines show the change in rate, relative to the baseline years (1979-1981). The ages at the time of death are shown to the right.

years. The rate is increasing the most among women who were born before 1930, most of whom began to smoke around the time of World War II.

Second, the lung cancer rates among older women are increasing at a faster rate than the rates among men of the same age. More men were exposed to smoking among this older cohort, and this is reflected in the higher rates among men. However, because more men have quit compared with women, the rates of cancer are not increasing at as fast a rate.

Third, lung cancer rates have declined by one-third among men 45-54, but have changed relatively little among women of those ages. For the first time, men born in the 1950s will have a lower lifetime risk of lung cancer than men born in the preceding decades. These men, who would have started smoking during the 1960s, benefited from the public education campaigns about the health effects of smoking. However, the effects of this public health campaign on women have not been as evident.

Finally, the lung cancer rates in Wisconsin have been consistently lower than the rates in the United States. However, the rates have increased more in Wisconsin over the past 15 years. This suggests that smoking rates in Wisconsin have not declined at as fast a rate, compared with the rest of the U.S.

Trends in lung cancer and tobacco use must be monitored closely by the public health community in this state. It has taken over 30 years to see a decrease in the rates of lung cancer, and these improvements are seen mostly among men born since 1950. Greater public and private resources need to be dedicated to helping the thousands of smokers in Wisconsin who are trying to quit. In addition, if the rates of smoking continue to increase among this state's youth, the effects will be seen in higher lung cancer death rates in the decades to come.[15,16]

References

1. Miller GH, Golish JA, Cox CE, Chacko DC. *Women and lung cancer: a comparison of active and passive smokers with nonexposed smokers,* Cancer Detection & Prevention 1994;18(6):421-30.
2. Petersen, GM. *Epidemiology, screening, and prevention of lung cancer* [Review], Current Opinion in Oncology 1994 Mar;6(2):156-61.
3. Samet, Jonathan M, M.D., *The Epidemiology of Lung Cancer,* Chest 1993 Jan; 103S: 20S-29S.
4. Seale DD, Beaver BM. *Pathophysiology of lung cancer* [Review], Nursing Clinics of North America 1992;27(3):603-13.
5. Healthy People 2000 Review. Washington (DC); US Department of Health and Human Services, Public Health Service, 1992:102.
6. Ernster VL. *The epidemiology of lung cancer in women.* Annals of Epidemiology 1994;4(2) :102-10.
7. Zang E, Wynder E. *Differences in lung cancer risk between men and women: examination of the evidence.* JNCI 1996;21; 88 (3/4):183-192.
8. Anonymous. *Cigarette smoking among women of reproductive age--United States,* 1987-1992, MMWR 1994;43(43): 789-91, 797.
9. Ries LA, Miller BA, Hankey BF, et al., editors. SEER cancer statistics review, 1973-1991; tables and graphs. Bethesda (MD); National Cancer Institute. NIH Publication No. 94-2789, 1994;264.
10. American Cancer Society. Cancer facts and figures-1994. Atlanta (GA); American Cancer Society, 1994;1-28.
11. Brownson RC, Chang JC, Davis JR. *Gender and histologic type variations in smoking-related risk of lung cancer.* Epidemiology 1992; 3: 61-4.
12. Jenks S. *Gender may render women at risk for lung cancer* [news], Journal of National Cancer Institute 1996;88(3-4):144.
13. Risch HA, Howe GR, Jain M, et al. *Are female smokers at higher risk for lung cancer than male smokers? A case-control analysis by histologic type.* Am J Epidemiol 1993;138:281-93.
14. Osann KE, Anton-Culver H, Kurosaki T, Taylor T., *Sex differences in lung-cancer risk associated with cigarette smoking.* Int J Cancer 1993;54:44-8.
15. Beckett, WS. *Epidemiology and etiology of lung cancer,* Clinics in Chest Medicine 1993;14(1): 1-15.
16. Boyle P, Maisonneuve P. *Lung cancer and tobacco smoking* [Review]. Lung Cancer 1995;12(3):167-81.

WISCONSIN MEDICAL JOURNAL

Smoke-free Workplaces, Wisconsin Municipal and County Government Buildings, 1996

Eric Aakko, Patrick Remington, MD, MPH, Jamie Calamon, Sarah Brazin, and Liz Ford

INTRODUCTION

Cigarette smoking is the leading preventable cause of death and disease in this country.[1] Environmental tobacco smoke (ETS) is also a cause of death – including lung cancer and heart disease – in healthy non-smokers.[2] ETS has been classified as a known Group A carcinogen and nonsmokers subjected to ETS are exposed to nicotine, carbon monoxide, and other cancer causing agents.[3,4] Simple separation of smokers and nonsmokers within the same airspace does not eliminate the risks of nonsmokers to ETS.[2] Consequently, the National Institute of Occupational Safety and Health has concluded that all workplaces should be smoke-free.[5]

Local governments can play a leadership role in promoting optimal health in their communities. This can be accomplished by setting a community standard and banning smoking in all government-owned buildings. In 1995 and 1996, all county and municipal governments were surveyed to identify their policies regarding clean indoor air. This report summarizes results from 1996, with a focus on those communities that have achieved the goal of providing a completely smoke-free environment for all governmental employees and patrons.

METHODS

A survey was sent to each county and municipal (city and village) clerk in Wisconsin during 1995 and 1996. The methods and results for 1995 are described elsewhere.[6] In August of 1996, all county and municipal clerks were surveyed, with follow-up letters sent in September of 1996 to non-responders. Clerks were asked about tobacco control policies in three areas: clean indoor air, youth access, and advertising and promotion.

This report describes the results of the questions regarding clean indoor air. Respondents were asked if they had a policy regarding clean indoor air. If they did, they were asked to send a copy of the policy or ordinance back with the completed survey. One of us (SB) reviewed all of the returned policies/ordinances, and classified them as follows: 1.) smoking is banned in all government-owned buildings; 2.) smoking is banned in some, but not all government-owned buildings; or 3.) smoking is restricted in government-owned buildings (i.e., enacting state statute 101.123) (see sidebar).

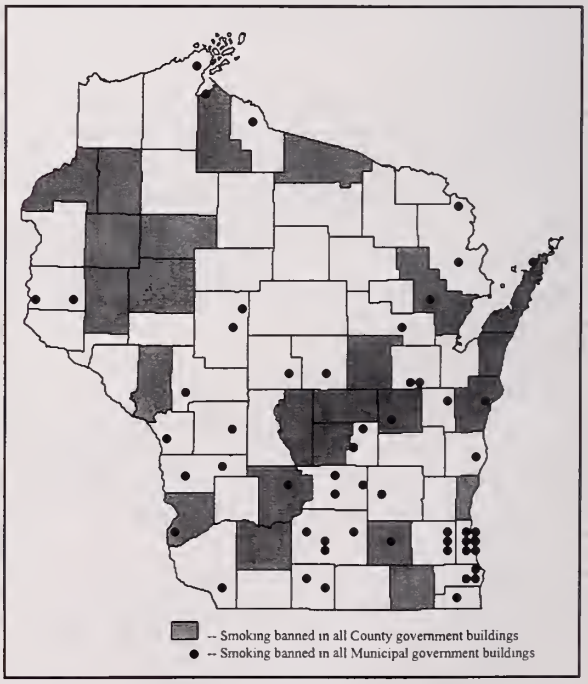

Figure: Municipal and county governments that have banned smoking in all government buildings, Wisconsin, 1996.

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Table 1: Clean Indoor Air Policies in Municipal and County Buildings, Wisconsin, 1996.

	Municipality (n = 567)	County (n = 72)
Has an ordinance/policy	239 (42%)	63 (87%)
Banned in all buildings	54 (9%)	24 (33%)
Banned in some buildings	27 (5%)	24 (33%)
Restricted to smoking areas	90 (16%)	6 (8%)
Unknown extent	68 (12%)	9 (13%)
No Ordinance/policy	328 (58%)	9 (13%)

RESULTS

Cities and Villages: Surveys were completed by 567 of 583 (97%) of municipalities. As of 1996, 239 of 567 (42%) of responding municipalities had enacted a clean indoor air ordinance or policy (Table 1). Furthermore, 27 of 567 (5%) have banned smoking in all government-owned buildings (Table 2); 27 (5%) have banned smoking in some government-owned buildings; 90 (16%) restrict smoking to designated areas; and 68 (12%) have a smoking policy, but did not return a copy of the policy/ordinance. The remaining 328 of 567 (58%) have not enacted a clean indoor air policy.

Counties: Surveys were received from 72 of 72 (100%) counties. As of 1996, 63 of 72 (88%) counties had enacted a clean indoor air ordinance or policy (Table 1). Smoking is completely banned in 24 of 72 (33%) county government-owned buildings (Table 3); 24 (33%) have banned smoking in some government-owned buildings; 6 (8%) restrict smoking to designated areas; and 9 (13%) have a smoking policy, but did not return a copy of the policy/ordinance. The remaining 9 of 72 (13%) have not enacted a clean indoor air ordinance/policy.

COMMENT

Over the past several years, Wisconsin's local governments have increasingly enacted clean indoor air ordinances and policies. Although there is a trend toward providing more smoke-free environments, only 33% of counties and 5% of municipalities provide 100% smoke free government-owned buildings. Surveys have shown that Americans are aware about the risks posed by ETS and favor efforts to reduce exposure to it. In 1992, 97% of nonsmokers and 79% of current smokers agreed that exposure to ETS was harmful.[7] The percentage of Americans who favor workplace smoking restrictions increased from 81% in 1983 to 94% in 1992 (7).

This study has several limitations. Namely, the standard we posed for being 100% smoke-free was quite stringent. County or municipal owned government buildings may essentially be smoke-free, but if their ordinance had exemptions (e.g., county jails, grandfather clauses, or nursing homes that allow smoking), then they did not qualify. This may be particularly true in larger counties and municipalities that have many buildings and facilities. In addition, the individuals who completed the surveys may not have known the specific laws or policies regarding clean indoor air.

Smoke-free government buildings help create a safe and healthy community. Consequently, local governments and communities are encouraged to reassess their clean indoor air policies. Local governments can lead their communities in minimizing the risks to environmental tobacco smoke exposure by providing their employees and patrons, with 100% smoke-free buildings.

ACKNOWLEDGMENTS

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REFERENCES

1. Centers for Disease Control and Prevention. *Cigarette-attributable mortality and years of potential life lost– United States, 1990.* MMWR 1993; 42:645-649.
2. U.S. Department of Health and Human Services. *The health consequences of*

Table 2: Municipalities that have banned smoking in all government buildings, Wisconsin, 1996.

Abbotsford	Madison
Appleton	Melrose
Ashland	Muskego
Baraboo	New Berlin
Bayfield	New Glarus
Bayside	Niagra
Beaver Dam	Omro
Berlin	Onalaska
Black Earth	Ontario
Brillion	Plover
Brodhead	Portage
Butler	Poynette
Columbus	Prairie du Chien
Crivitz	Princeton
Cuba City	Shawano
Deerfield	Sister Bay
Elmwood City	South Milwaukee
Fox Point	St. Francis
Frannklin	Sturevant
Gillett	Tomah
Glenwood City	Twin Lakes
Hudson	Two Rivers
Hurley	Verona
Jefferson	Viroqua
Kimberly	West Milwaukee
Kohler	Wind Point
Loyal	Wisconsin Rapids

Table 3: Counties that banned smoking in all government buildings, Wisconsin, 1996.

Adams	
Ashland	Ozaukee
Barron	Rusk
Burnett	Sauk
Chippewa	Trempealeau
Crawford	Vilas
Door	Walworth
Dunn	Washburn
Iowa	Waupaca
Jefferson	Waushara
Kewaunee	Winnebago
Manitowoc	
Marquette	
Oconto	

smoking: Cancer and chronic lung disease in the workplace. A report of the Surgeon General, 1985 (DHHS Publication No. (PHS) 85-50207).

3. U.S. Environmental Protection Agency. *Respiratory health effects of passive smoking: Lung cancer and other disorders.* The report of the EPA, 1993 (EPA/600/6-90/006F).
4. Pirkle JL, Fegal KM, Bernert JT et al. *Exposure of the US population to environmental tobacco smoke: The third National Health and Nutrition Examination Survey, 1988-1991.* JAMA 1996; 275: 1233-1240.
5. U.S. Department of Health and Human Services. NIOSH Current Intelligence Bulletin 54: *Environmental tobacco smoke in the workplace, lung cancer and other health effects, 1991* (DHHS Publication No. NIOSH, 91-108).
6. Brazin S, Gothard M, Smith BA, Remington PL. Local tobacco control ordinances in Wisconsin, 1995. Wis Med J 1996 November;95(11):773-4.
7. The Gallup Organization, Inc. *Survey of the public's attitudes toward smoking.* Princeton, NJ: The Gallup Organization, Inc., 1992.

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Enforcement of Minor Tobacco Laws: Wisconsin, 1996

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ABSTRACT

The objective of this project was to profile the statewide enforcement of laws prohibiting sales of tobacco to minors and purchasing/possession of tobacco by minors in 1996. A sample of Wisconsin cities or villages (n=86) were surveyed on adoption of pertinent state statutes as local ordinances and the number of recorded violations. About 70% of municipalities have passed illegal sales ordinances and about 80% have passed purchase/possession ordinances. Over 6,000 citations were issued to minors in 1996 for purchase/possession of tobacco and 67 citations were issued for illegal sales to minors. By extrapolation, we estimate that there is approximately one commercial selling citation issued for every 112,000 packs of cigarettes sold to minors. We discuss this disparity and submit that a shift in enforcement, to commercial sellers, is needed to help reduce the increasing use of tobacco by minors.

INTRODUCTION

Each day, 60 Wisconsin children become addicted to cigarettes and twice that number will try cigarettes for the first time.[1] The rate of teenage tobacco use in the state has increased sharply in recent years with the total number of smokers between the ages of 12 and 17 estimated to be 110,000.[2,3]

One factor figuring into this troubling trend is the commercial sale of tobacco, which teens have reported as a typical source.[4,5] There have been numerous reports verifying the proclivity of retail outlets to sell tobacco to minors.[6-8] That retail outlets provide a readily accessible source of tobacco has been at least, partially attributed to lax enforcement of existing laws. Wisconsin statutes prohibit the sale of tobacco to minors (Wis Stat 134.66) and purchase, attempted purchase or possession of tobacco by minors (Wis Stat 938.983). These statutes contain language which mandates that localities can do only what is specified in the statutes. The intent and power of this strict conformity provision was recently tested and upheld.[9]

Despite the long historical presence of these laws or ordinances,[10] documentation of enforcement has largely been limited to individual community records. The objective of this project was to compile local data in order to obtain a statewide profile of enforcement over the span of one year.

METHODS

Age-of-sale and possession statutes, as with many other state statutes, tend to be most effective when enforced by local jurisdictions. As such, they are often adopted as local ordinances. This process provides a number of advantages including less cumbersome court procedures, return of revenue to the local community and allowing local residents to select those state statutes that best reflect their needs. Local interest is most reflected in local ordinances.

We secured a list of Wisconsin cities and villages[11] along with telephone numbers of corresponding city offices and between October, 1996 and January, 1997, we surveyed each of 55 listed municipalities at or above 10,000 population. Using a random number table, a sample of 40 was obtained from the 497 remaining less populated cities/villages for a total sample size, n = 86. Phone calls were first placed to city or village clerks who were asked if their municipality had adopted as (a) local ordinance(s) either or both of Wis State Statute 134.66, making sales of tobacco to minors illegal, and Wis State Statute 938.983, which makes it illegal for minors to possess, attempt to purchase or purchase tobacco.

When asked about citations, most city government offices suggested contacting police departments. In larger communities, records sections of police departments were asked for the number of citations issued, in 1996, under either or both state laws or local ordinances. In smaller communities

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these questions were fielded by the police chief or an officer. Most of the respondents returned our calls with the information at a later date. Follow-up calls were made as necessary.

Ordinance information was typically obtained by city/village officials, from an examination of city code books. Citation information was typically obtained from records searches. No attempt was made to verify the information communicated to us.

RESULTS

All of the cities or villages surveyed were able to answer our questions on ordinance adoption. Ninety-five per cent of the surveyed municipalities provided numbers of sales citations and 92% provided numbers of youth citations. In two cases, estimates for the number of citations issued to minors were given in lieu of hard numbers.

Table 1 reports the adoption of state statutes as local ordinances. A greater percentage - 81% - of surveyed municipalities have adopted the state statute prohibiting youth purchase/possession than have adopted the state statute prohibiting sales to minors - 72%. The differences are accounted for almost solely by municipalities with below 10,000 population. Slightly over half of these smaller communities have a local ordinance prohibiting sales to minors where eight of ten have an ordinance making youth purchase/passession illegal.

The results in Table 2 show that as the population decreases, there is a corresponding decrease in the percentage of cities/villages issuing any citations to tobacco sellers. This pattern is absent for purchase/passession citations. From our collected data we found that 17% of municipalities issued at least one seller citation. By contrast, 87% of municipalities issued at least one youth citation. A total of 6,111 reported youth citations were issued up to the date of inquiry in 1996 and a total of 57 citations were issued to sellers. Communities with smaller to mid-sized populations produced the largest total number of citations.

Table 3 indicates that communities within the same population category varied considerably in the number of youth citations issued. The median number of citations paralleled population size.

DISCUSSION

This project assembled data from communities throughout Wisconsin to provide an indication of the status and enforcement of laws directly pertaining to the acquisition and use of tobacco by those under the age of 18. A report of this nature should be taken as an excerpt from the log on status and enforcement of tobacco age-of-sales and passession laws in Wisconsin communities. For the purposes of this report, enforcement is measured by the number of legal citations issued under state statutes or local versions. The reader should be cautioned that enforcement is more accurately, a complex combination of formal sanctions, such as citations, along with more informal means of control, many of which may go unrecorded. Additionally, readers should be attentive of other limitations of the study such as sample size for the smaller municipalities and imperfections inherent in the process of extrapolation.

Our findings reveal a slight difference in the local adoption of laws but a marked disparity in the measured enforcement. In aggregate, youth are cited at over 100 times the rate that sellers are cited (200 times in municipalities with less than 10,000 population and with populations of 39,000 to 149,000). Sellers were handed approximately nine citations for every 1,000 sanctions against minors purchasing or in possession of tobacco.

These results are consistent with those of studies in Minnesota and Utah which found penalties against youth to be much more frequent than those against retail outlets.[10,13] They also closely parallel the findings of an investigation of drinking age-laws enforcement in the US. In that study, the authors pictorially characterize alcohol age-law enforcement as a pyramid, with arrests or actions against sellers occupying the apex and sanctions against youth comprising the remainder.[14] That characterization also appropriately applies to our findings. Their analysis further observes that, considering the large numbers of youthful drinkers and frequency of drinking occasions, and the limited enforcement resources, producing a significant deterrent effect through increasing youth arrests would be difficult. It seems reasonable that this would be even more trying with youthful tobacco use. The increase in teenage tobacco use, the portability of tobacco products, the little interference their use poses on daily activities and the number of occasions where minors can use tobacco undetected, represents a formidable barrier to deterrent effects of citations. Despite large numbers of citations, it is unlikely that a perceived certainly of apprehension could exist or, if it is achieved, the probability of maintaining it for long would be low.

There is an increasing trend nationally toward criminalization of minor purchasers/users of

Table 1 - Percentage and number of cities/villages adopting state statutes as local ordinances.

City/Village Population	n	Illegal to sell %	Illegal to sell no.	Youth purchase/ possession %	Youth purchase/ possession no.
≥ 150,000	1	100	1	0	0
39,000-149,999	12	100	12	100	12
10,000-38,999	33	79	26	100	26
<10,000	40	58	23	80	32

Table 2 - Percentage of cities/villages issuing at least 1 citation and the total number of citations issued in 1996.*

City/Village Population	n	Illegal to sell %	Illegal to sell no.	Youth purchase/ possession %	Youth purchase/ possession no.
≥ 150,000	1	100	10	0	0
39,000-149,999	12	33	9	100	2038
10,000-38,999	33	17	32	78	2856
<10,000	40	10	6	92	1217

*From Jan. 1, 1996 to reporting date (between October 1, 1996 and December 31, 1996)

Table 3 - Median number and range of citations issued for youth purchase/possession in 1996.

City/Village Population	n	median no.	range
≥ 150,000	1	–	–
39,000-149,999	12	145	48 - 317
10,000-38,999	33	75	0 - 652
<10,000	40	22	0 - 150

tobacco and it has been advanced that this is an unintended, perhaps unethical, consequence of a tobacco control movement that has of late, placed an emphasis on the tobacco industry's access to youth.[15] In addition to dubious deterrent effects on the prevalence of teen tobacco use, the focus on legally penalizing minors has been called into question for other reasons. Detractors submit that this course of action is unjust, unproved and tends to exempt those gaining financially from responsibility, to the point of being counterproductive.[16,17,18] Others contend that criminalization of youth is a tobacco industry strategy to shift enforcement efforts away from merchants.[17,19]

If the primary objective is a reduction in tobacco use by minors, then from a resource-effectiveness standpoint, efforts at enforcement would do better to target the considerably smaller number of commercial tobacco dealers. Both the lack of illegal sales ordinance adoption (in smaller cities/villages) and the lack of enforcement - in the form of citations - if they do exist, indicates that this is currently not happening, save for a few instances. Besides the extraordinarily low number of seller citations, our results reflect that of the seller citations, over 80% were issued in just 9% of the municipalities. Larger numbers of seller citations appear to correlate with increased community attention. Of the seven cities which accounted for 84% of seller citations in 1996, five had either city or area citizen coalitions addressing tobacco control. Statewide efforts have been equally

lacking, though recently the first round of compliance checks on a sample of 389 of the estimated 15,000 tobacco retailers took place. These are designed to bring Wisconsin in conformity with the federal Synar Amendment requirements. Compliance was found to be 77%. Violators are subjected to a merchant education program (State of Wisconsin, Department of Health and Family Services, direct communication, 1997).

Despite these efforts successful commercial tobacco sales to minors goes virtually unabated. In 1995 tobacco retail outlets in Wisconsin sold an estimated 16,283,800 packs of cigarettes to adolescents between the ages of 12 and 17.[20] Based on our finding of 57 citations issued to sellers in 1996 and the populations of both sampled and unsampled cities, villages and towns, we estimate an additional 75 to 89 citations issued for the remaining unsampled cities, villages and towns. Using illegal packs sold as a denominator, we conservatively extrapolate that there was approximately one citation issued to a tobacco seller for every 112,000 packs of cigarettes commercially sold to minors in Wisconsin in 1996.

Tobacco use - particularly by young people - is a complex behavior which has been driven by commercial and technological forces since the beginning. It follows that the taming of these forces will precipitate the reduction necessary to protect population health. This compilation of records underscores the need for a shift in enforcement priorities, to properly focus enforcement efforts on commercial sellers of tobacco products. This approach appears to be non-existent in most Wisconsin communities. However, beyond correcting the deficiency disclosed by our findings, communities seeking to develop innovative and appropriate tobacco reduction strategies need the freedom of local control which current state statutes do not allow.

The difficulty of this shift likely lies in the considerable economic and political weight of tobacco marketing - a discussion of which is beyond the scope of this report.

REFERENCES:

1. University of Wisconsin Medical School, Center for Tobacco Research and Intervention, *Wisconsin Children at Risk: The Crisis of Tobacco Addiction*, 1995.
2. Chudy N, Yoast R, Remington P. Child and adolescent cigarette smoking and consumption. *Wis Med J* 1993;92(4):198-199.
3. *Preventing Tobacco Use Among Young People: A Report of the Surgeon General.* Atlanta, GA: Center for Disease Control and Prevention, Office on Smoking and Health; 1994.
4. Cismoski J, Sheridan M. Tobacco acquisition practices of adolescents in two Wisconsin communities. *Wis Med J* 1993;93(11):585-591.
5. Preliminary data from the 1997 Wisconsin Youth Risk Behavior Report, Wisconsin Department of Public Instruction.
6. Mead R. Teen access to cigarettes in Green Bay, WI. *Wis Med J* 1993;92(1):23-24.
7. Cismoski J, Sheridan M. Availability of cigarettes to under-age youth in Fond du Lac, Wisconsin. *Wis Med J* 1993;92(11):626-630.
8. Gothard M, Fox J, Flores de Pierquet T, Musial C, Yoast R. Over-the-counter sales of cigarettes to children: results of compliance checks in Wisconsin, 1992-1995. *Wis Med J* 1996;95(1):27-28.
9. U.S. Oil vs City of Fond du Lac. No. 95-0213, (D WIS Jan. 10, 1996).
10. Wisconsin Legislative Reference Bureau. *The Sale of Cigarettes to Minors, Wisconsin's Legislative History.* Brief 85-5, 1985.
11. State of Wisconsin Blue Book, Wisconsin Legislative Reference Bureau, 1995.
12. Forster JL, Komro KA, Wolfson M. Survey of city ordinances and local enforcement regarding commercial availability of tobacco to minors in Minnesota, United States, *Tobacco Control* 1996;5:46-51.
13. USDHSS (1990) Youth Access to Cigarettes, a report of the office of the Inspector General (New York, Office of the Inspector General).
14. Wagenaar AC and Wolfson M. Enforcement of the legal minimum drinking age in the United States, *Journal of Public Health Policy* 1994, 15:37-53.
15. Wolfson M and Hourigan M. Unintended consequences and professional ethics: criminalization of alcohol and tobacco use by youth and young adults, *Addiction* 1997;92(9):1159-1164.
16. Cismoski J. Blinded by the light: the folly of tobacco possession laws against minors. *Wis Med J* 1994;93(11):591-598.
17. Mosher JF. The merchants, not the customers: resisting the alcohol and tobacco industries' strategy to blame young people for illegal alcohol and tobacco sales. *Journal of Public Health Policy* 1995;16:412-431.
18. Institute of Medicine, 1994.
19. DiFranza JR and Godshall WT. Tobacco industry efforts hindering enforcement of the ban on tobacco sales to minors: actions speak louder than words. *Tobacco Control* 1996;5:127-131.
20. American Cancer Society, Wisconsin Division. *The Burden of Tobacco in 1997 in Wisconsin*, 1997.

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Recent Advances in MR Spectroscopy Expand its Applications in Neurologic Disease

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MR Spectroscopy (MRS) has been used experimentally for 50 years to study chemical structure. Clinically, it has been applied to the examination of metabolites in the normal human brain and in many types of brain pathology. Recently MRS has acquired important roles in neurology and neurosurgery. The purpose of this article is to review the most common clinical application of MRS emphasizing the experiences with MRS at 0. 5 Tesla recently developed at Medical College of Wisconsin.

Rather than an image, MRS produces a plot which represents the relative concentrations of metabolites present in a region of brain or of other tissue. The MRS exam is performed in an MR imager after standard sagittal localizer and axial screening images are acquired. One or more regions of interest are selected from the images. Additional technical adjustments are made and a series of signals are acquired and averaged from the region of interest. Total time for acquiring images and spectra for each case is 30- to 45-minutes.

On a work station, the MRS spectra are processed with a series of steps to produce the plots of signal intensity versus frequency, the proton resonance spectrum. Metabolites are identified as peaks at specific frequencies within the tissue sampled. Proton MRS frequencies are expressed as a fraction (parts per million or ppm) of the reference frequency used for MRI. The recognizable peaks include myoinositol (Myol, at 3.58 ppm), choline (Cho, at 3.23 ppm), creatine (Cr, at 3.03 ppm), glutamine and glutamate (Glx, at 2.45 ppm), and N-acetyl aspartate (NAA, at 2.03 ppm).

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Recently, MRS has been performed successfully at magnetic field strengths once considered too low for spectroscopy (0.5 Tesla). At 0.5 Tesla, the signal-to-noise ratios are generally diminished by 50% compared to the conventional field stregth used for clinical MRS (1.5T).[1] The spectra at 0.5T demonstrate a distinct peak for the combination of glutamine and glutamate, which at the higher field strength have multiple smaller peaks (Figure 1). At 0.5T, lactate and lipid resonances are more readily differentiated than at 1.5T. The areas under the peaks in the proton spectrum provide a measure of the relative concentrations of N-acetyl aspartate, creatine, and phosphocreatine, choline, myo-inositol, glutamine and glutamate, glucose, alanine, citrate and lactate.

Many clinical conditions can be diagnosed from the relative amplitude of these brain metabolites. N-acetyl aspartate (NAA) is found only in

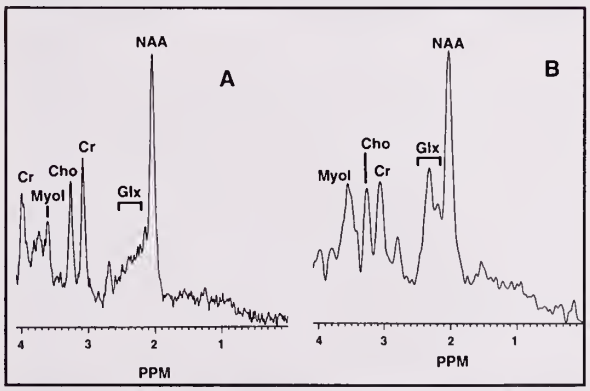


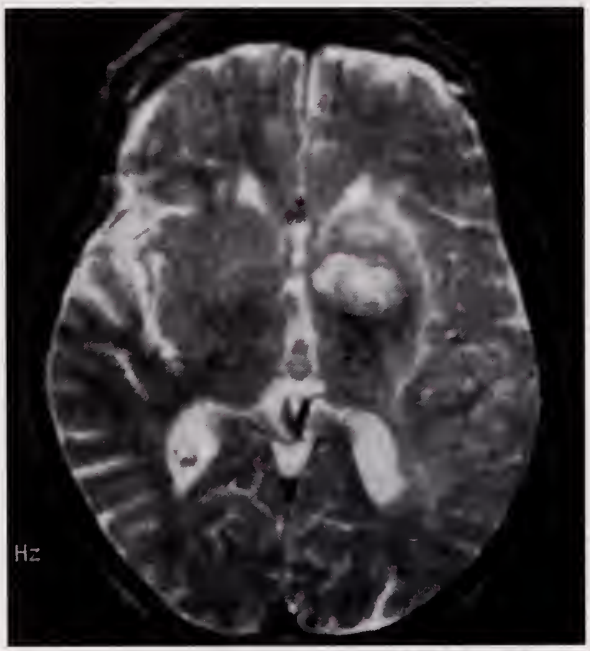
Figure 1. MRS of Normal Human Brain at 0.5T. Since NAA is the most abundont single, resonance in the brain, its peok amplitude is the highest in the normal brain spectrum. The other major resonance peaks ore assigned to protons of myo-inositol (3.58 ppm), methyl protons of choline-containing compounds (3.23 ppm), methyl protons of creatine and phosphocreotine (3.03 9 ppm), glx (2.45 ppm), and lipid (0.5-1.5 ppm). The lactate methyl doublet (center position ot 1.33 ppm) is undetectoble. The greatest difference between this spectrum and one at 1.5T is the glx resonance.

normal healthy neurons. Therefore, a diminished NAA resonance amplitude reflects a depletion of normally-functioning neurons. Creatine and creatine phosphate, important in energy metabolism, vary little in normal brain tissue. The major source of the choline peak is the phosphoryl choline precursors for and degradation productions of cell membranes and myelin. Therefore, elevations of the choline peak usually indicate a neoplasm, which is associated with increased cell membrane synthesis and degradation. Elevated glutamine amplitudes have been shown with MRS at 0.5T in the brain in patients with hepatic encephalopathy.[2] An increase in exctracellular glutamate, an excitatory neurotransmitter, is thought to mediate cell damage in many processes including epilepsy and infarction. Because MRS at 0.5T detects glutamate effectively, it may be useful in the evaluation of patients with epilepsy. Lactate is detected by MRS in processes associated with anaerobic glycolysis but not in normal brain. Myo-inositol is thought to be a non-nitrogenous regulator of cerebral osmolarity.

MRS IN BRAIN TUMORS

Proton MRS has become an important tool for the differentiation of neoplastic (Figure 2) from non-neoplastic processes such as demyelinating disease (Figure 3), ischemia (Figure 4) or infection.[3-7] In general, spectra of human brain tumors have lower NAA and higher choline resonances than normal brain and non-neoplastic processes. MRS often shows abnormally high levels of lactate (Lac) and lipid, and low levels of creatine and phosphocreatine in tumors. Lipid accumulates because of cellular necrosis. Lactate is present because of increased anaerobic glycolysis in hypoxic neoplastic tissue. The NAA/choline ampalitudes ratio differentiates neoplastic from non-neoplastic lesions with a high degree of accuracy.

In a series of 55 cases studied at Medical College of Wisconsin, MRS at 0.5T interpreted by blinded readers had a sensitivity of 85% and a specificity of 74%.[8] When interpreted together with the MR images, MRS was 96% accurate. MRS may be used to confirm that a lesion requires biopsy because of a high likelihood of neoplasia or conversely that is warrants close observation or other therapy because of a low likelihood of neoplasia. It may also serve to identify the portion of the tumor that will most likely yield a positive biopsy result by characterizing the most metabolically active and least hypoxic and necrotic portions of the tumor. In other cases in which MRS characterizes the lesion as neoplasm, radiation therapy may be performed without the need for biopsy. Based on the Health Care and Utilization Project database, MRS used in combination with MRI to select patients for biopsy would save an



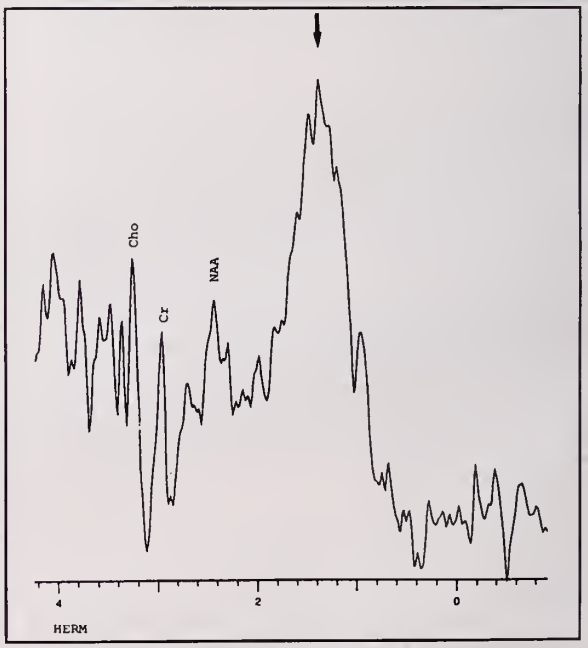


Figure 2. An 84-year-old white female presented with left focial weakness to a neurosurgeon. MRI showed a mass involving the left basal ganglia (A). MRS was performed, which showed elevated choline consistent with a neoplastic process probably of high grade (B). Radiation therapy was initiated without a biopsy of the lesion, which was sufficiently deep that biopsy carried high risk.

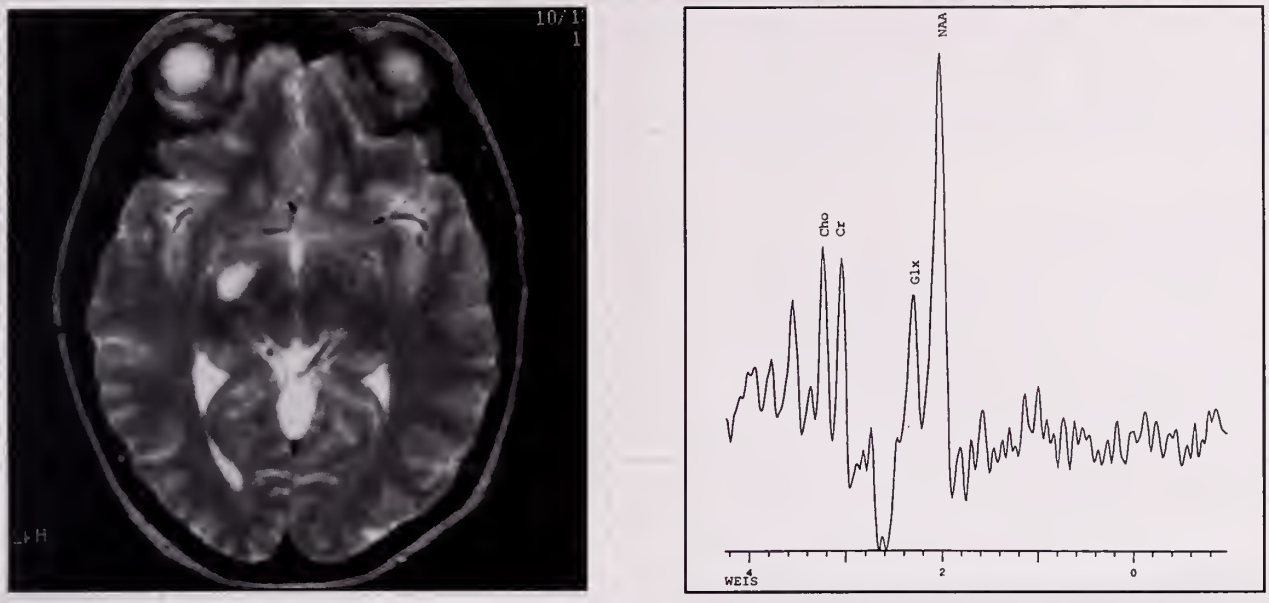


Figure 3. A 45-year-old female with "snowy" or "foggy" vision especially during reading and intermittent occipital headaches had abnormal signal intensity and contrast enhancement in the basal ganglia. The lesion increased in size on the MRI performed two weeks later (A). The lesion appeared to involve gray matter (geniculate nucleus) as well as optic tract fibers. Tumor was a primary consideration of the referring physician. The physician suggested to the patient that if the lesion continued to enlarge that a stereotactic biopsy of the lesion would be recommended. The spectrum showed no significant elevation of choline (B). The lesion decreased in size and enhancement over time. The diagnosis of Multiple Sclerosis was ultimately made by laboratory studies and serial MRI.

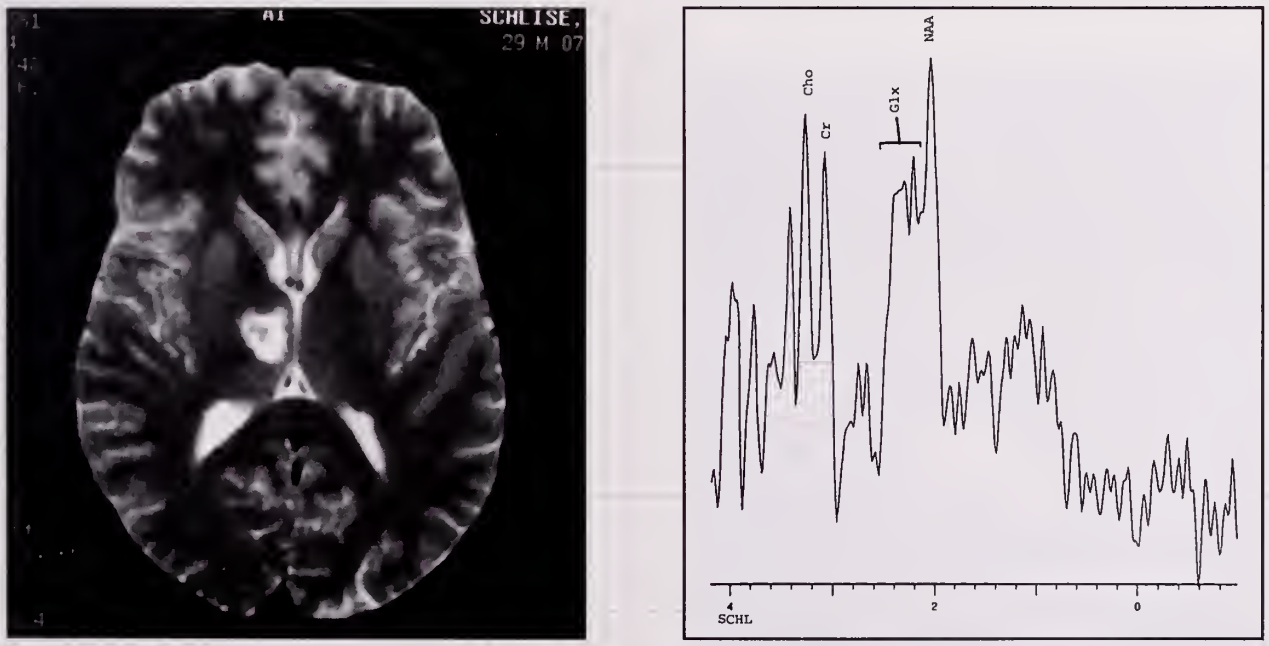


Figure 4. A 29-year-old man presented with the recent onset of left lower extremity weakness. MRI (A) showed an expanding high signal intensity process in the right thalamus and internal capsule, which was considered likely neoplastic. MR Spectroscopy (B) showed no evidence of elevated choline. Biopsy of the lesion was deferred and the patient was observed. Three months later, the lesion had diminished in size.

estimated $61,600,000 in the U.S. in one year.[8] In patients who have received radiation treatment or chemotherapy, MRS is used to distinguish radiation induced necrosis from recurrent tumor, a differentiation which is difficult on the basis of MRI images.

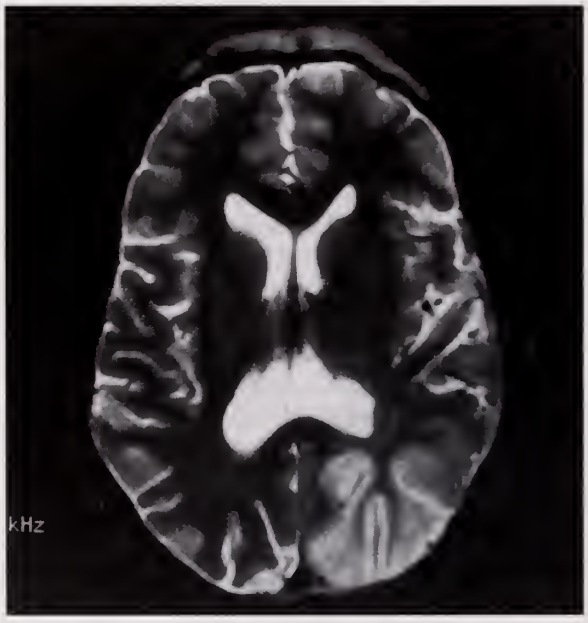
MRS IN EPILEPSY

Diminishing neuron populations and increasing gliosis characterize the mesial temporal cortex, hippocampus, amygdala and parahippocampal gyrus of patients with chronic partial seizures. The loss of cells is most pronounced within specific portions of the hippocampal formation (CAT, CA3 and the dentate hilum). Bilateral involvement of the temporal lobes in chronic partial epilepsy is common, but the side of the epileptogenic focus is typically more severely affected. MRI may show atrophy and increased signal intensity in high resolution T2 weighted images, however MR images are not sensitive to early changes. The detection of early sclerosis by MRI may be inaccurate, especially if the patient's head is positioned with even a little obliquity. Diminished numbers of healthy neurons in the hippocampus are detected in MRS by reduction in the NAA peak. In patients with chronic partial seizures, the NAA level in the hippocampus is diminished, with either 1.5T[9-12] or 0.5T MRS techniques.[13]

The glx peak, representing the combination of glutamine and glutamate is consistently elevated in the hippocampus in patients with epilepsy. The largest elevations of the glx occur in patients in status epilepticus.[14] The glx level is likely related to both the seizure intensity and the proximity of epileptogenic focus. glx levels may offer a method of measuring the excitotoxic process preceding neuronal loss and a means of lateralizing the seizure focus. Hippocampal sclerosis is found on MR images in 75% of adult patients with intractable temporal lobe epilepsy, while decreased NAA due to neuronal loss is found by MRS in 88%.[12] The MRS findings are consistent with interictal PET data showing a region of decreased glucose metabolism around the epileptogenic focus. MRS has been used to predict the outcome of tailored temporal lobectomy for chronic epilepsy.[15] Reduced NAA in the left temporal lobe was an accurate prognosticator of verbal memory deficit in patients undergoing right temporal lobectomy.

MRS IN METABOLIC DISEASE

MRS is useful in the diagnosis and the managment of mitochondrial encephalopathy or other metabolic disorders involving the brain. An indication of mitochondrial disease is anaerobic glycolysis in brain tissue. The diagnosis of metabolic disease of the brain can be documented with MRS in appropriately selected cases by demonstrating elevated lactate in regions of brain which appear normal on MR imaging. When suspected clinically, the



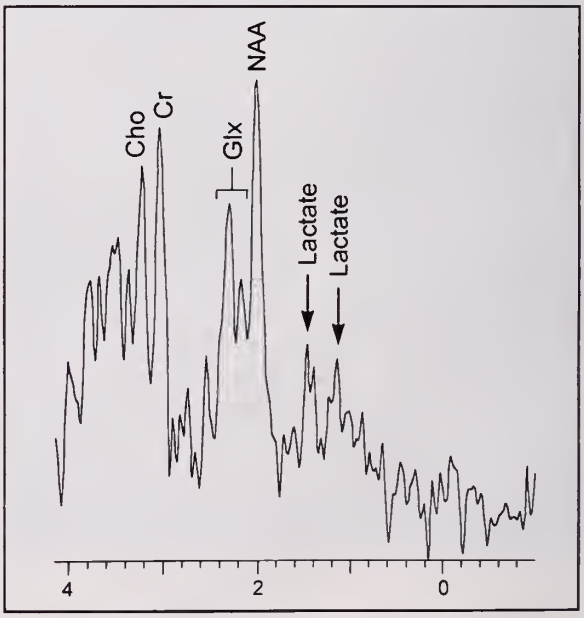


Figure 5. A 45-year-old man had waxing and waning neuralgic symptoms, which suggested the clinical diagnosis of mitochondrial encephalopathy. MRI showed swollen cortical gray matter consistent with mitochondrial disease (A). MRS showed evidence of lactate in apparently uninvolved regions of brain supporting the diagnosis of a mitochondrial encephalopathy (B).

diagnosis of a metabolic disorder such as MELAS can be supported by a noninvasive MR spectroscopic study (Figure 5).

At 0.5T, MRS has the important advantage that the glx levels can be monitored. In patients treated with dichloroacetate (DCA) to lower lactate levels, the lactate and the glx levels can be monitored non-invasively with MRS. While decreasing lactate, DCA may not reduce extracellular Glx in some patients. The possible adverse effect of elevated glutamate on the neuron population can be monitored by means of the glx and NAA peaks. MRS may assist in determining the optimal dosage of DCA and determining the appropriate use of N-methyl d-aspartate (NMDA) receptor antagonists.

While metabolic disease of the brain is not common, MRS provides an important tool for its diagnosis. Its role in monitoring treatment and natural history of the disease will be clarified as experience increases.

SUMMARY

MRS extends the diagnostic power of MRI by displaying the biochemical composition of a selected tissue or region. When MR imaging shows a lesion, the evaluation of the chemical composition by MRS can help determine whether biopsy, observation or medical treatment is indicated. It can save some patients from biopsy prior to radiation or chemotherapy. In the future, both the image information and the spatial distribution of chemical constituents throughout the brain will be displayed with techniques such as chemical shift imaging (CSI). MRS improves the accuracy of MRI diagnosis and prognosis. MRS is performed at many sites in the country and is reimbursed by many insurers. MRS has been approved by the AMA for a CPT- 4 code for reimbursement.

REFERENCES

1. Prost RW, Li S-J. Brain tumors: localized H-1 MR spectroscopy at 0.5 T. *Rodiology* 204(1):235-238,1997 Jul.
2. Prost RW, Mark L. Mewissen M, Li S-J; Detection of glutamate/glutamine resonances by Magnetic Resonance Spectroscopy at 0.5T (in press) *Mognetic Resononce in Medicine* 1996 hepatic encephalopathy.
3. Poptani H, Gupta R R, Pandey R, JainVK, and Chhabra D K. Characterization of intracranial mass lesions with in vivo proton MR spectroscopy. *AJNR* in press Journal 1995;16:1593-1603.
4. Luyten P R, Marien A J H, Heindel W, van Gerwen P H J, Hernholz K, den Hollander J A, Friedmann G, and Heiss W. D. Metobolic imaging of patients with intracranial tumors: hl MR spectroscopic imaging and PET. *Rodiol* 1990;176:791-799.
5. Sutton L N, Wang Z, Gusnard D, Lange B, Perilongo G, Bogdan A R, Detre J A, Rorke L, and Zimmerman R A. Proton magnetic resonance spectroscopy of pediatric brain tumors. *Neurosurgery* 1992;31:195-202.
6. Ott D, Hennig J, and Ernst T. Human brain tumors: assessment with in vivo proton MR spectroscopy. *Rodiol* 1993;186:745-752.
7. Shimizu H, Kumabe T, Tominaga T, Kayama T, Hara K, Ono Y, Sato K, Arai N, Fujiwara S, and Yoshimoto T. Noninvasive evaluation of malignancy of brain tumors with proton MR spectroscopy. *AJNR* 1996;17: 737-747.
8. Rand SD, Prost R, Haughton V, Mark L, Strainer J, Johansen J, Kim TA, Chetty VK, Mueller W, Meyer G, Krouwer H. Accuracy of Single-Voxel Proton MR Spectroscopy in Distinguishing Neoplastic from Nonneoplastic Brain Lesions. *AJNR* 18:1695-1704. Oct. 1997 0195-6108/97/1809-1695.
9. Mathews PM, Andermann F, Arnold DL. A ptoton magnetic resonance spectroscopy study of focal epilepsy in humans. *Neurology* 1990, 40:985-9.
10. Gadian DG, Connelly A, Duncan JS, et al. ^{1}H magnetic resonance spectroscopy in the investigation of intractable epilepsy. *Scto Neurol Scand* 1994;89 (suppl 152) 116-22.
11. Garcia PA, Laxter KD, van der Grond J, Hugg JW, Matson GB, Weiner MW. Proton magnetic resonance spectroscopic imaging in patients with frontal lobe epilepsy. *Ann Neurol* 1995;37:279-81
12. Connelly A, Jackson GD, Duncan JS, King MD, Gadian DG. Magnetic resonance spectroscopy in temporal lobe epilepsy. *Neurology* 1994; 44:1411-7
13. Kim TA, Morris G, Mueller W, Haughton V, Rand S. MRS The accuracy of MRS at 0.5T in the discrimination of neoplasm and non-neoplastic desease in the cerebrum (submitted to *AJNR*)
14. Kapeller P, Fazekas F, Schmidt R, Stollberger R, Varosanec S, Offenbacher H, and Lechner H. Evidence of glutamate causing transient cerebral abnormalities after focal status epilepticus. abstract, *SMRM* 1996;: 616.
15. Incisa della Rochetta A, Gadian DG, Connelly A, et al. Verbal memory impariment after right temporal lobe surgery; role of contralateral damage revealed by ^{1}H magnetic resonance spectroscopy and T_2 relaxometry. *Neurology* 45:797-802, 1995

WISCONSIN MEDICAL JOURNAL

Status Epilepticus after Cranial CT with Contrast Media

Timothy G. Drake, MD and Harry D. Kerr, MD, Milwaukee

ABSTRACT

This case illustrates intravenous radiographic contrast material as an unusual and little known etiology of seizure. A brief review of the literature is provided in which the incidence of contrast induced seizures and the potential risk factors for their development are discussed.

CASE REPORT

A 71-year-old man with a history of a grade 2 astrocytoma involving the left parietal lobe arrived at the emergency department (ED) with protracted seizure activity. Earlier that afternoon he had undergone surveillance cranial computed tomography (CT) with intravenous contrast as part of a scheduled examination. The duration of the scan was about 30-minutes after which he was discharged. While walking to the car immediately following the examination, his wife noted that his speech was slurred and that he was drooling. On the way home, the patient developed jerking of the right upper extremity and urinary incontinence. He arrived at the ED with generalized seizure activity continuous for 90-minutes. He had been well prior to the onset of the seizures.

The astrocytoma had been resected seven months prior to his presentation. Following surgery he received a course of radiation treatment. He developed seizures in the post-operative period which had been well controlled with valproic acid. He had been entirely free of seizures for three months. His other medications included prazosin and lisinopril for hypertension and insulin for long-standing diabetes. He had taken his usual dosage of 14-units of NPH insulin that morning and had eaten both breakfast and lunch as usual. He finished lunch about two hours prior to the scan. The patient was allergic to phenytoin.

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The physical examination revealed a well-developed, well-nourished elderly man who withdrew each extremity to noxious stimuli but was otherwise unresponsive. His blood pressure was 224/114 mm Hg, temperature 99.0, pulse 82, and respiratory rate 18. Tonic clonic movements of his right upper extremity were noted. He did not respond to his name being called. The right pupil was dilated and sluggishly reactive to light. The left pupil was aphakic. Corneal reflex was negative. Gag reflex was present. His fundi were normal. Extraocular movements were full and equal. Deep tendon reflexes were equal bilaterally, and the plantar reflexes were upgoing bilaterally. The neck was supple. The physical examination was otherwise unremarkable.

Fingerstick glucose was 57 mg/dl on arrival. The serum sodium was 138 mmol/l, magnesium 2.1mg/dl, calcium 9.1mg/dl, creatinine 0.8 mg/dl, and blood urea nitrogen 21 mg/dl. The valproic acid level was therapeutic at 68 micrograms/ml. The cranial CT scan was unchanged from earlier studies and revealed enhancement of the tumor bed consistent with edema or post radiation changes. No evidence was found of increased intracranial pressure, bleeding or tumor recurrence. The electrocardiogram was normal.

One ampule of 50% dextrose in water was given intravenously shortly after arrival in the ED but resulted in no change in his seizure activity. One-hour after arrival the serum glucose was 138 mg/dl. After receiving a total of 7-mg of intravenous lorazopam the seizure activity ceased and did not recur during the remainder of his four-day hospital stay. Subsequent blood pressure determinations were no higher than 144/70 mm Hg. He was monitored overnight in the ICU and the following morning was awake and oriented to name and place. He slowly regained full orientation but ambulation and speech were mildly impaired to the same degree as that which followed his cranial surgery. He was discharged home in stable condition.

DISCUSSION

The patient's seizure activity was temporally related to the administration of intravenous contrast for computed tomography of the brain. Seizures due to contrast are rare but well documented. In a one-year study, 29 (0.19%) seizures were noted among 15,226 cranial CT scans with intravenous contrast.[1] Another study noted 7 (0.49%) seizures among 1,418 patients undergoing CT with contrast.[2] Many factors may be involved in the precipitation of a seizure when contrast material is administered including the route of administration, chemical structure of the medium, volume given, rate of infusion, and pre-existing neurologic or metabolic disorders.[3]

Contrast dye is categorized as being ionic and high osmolar or non-ionic and low osmolar material. Ionic material may be more likely to penetrate the blood brain barrier than non-ionic material and may, therefore, be more likely to precipitate seizure activity. Seizures may result from chemotoxic properties of contrast agents, but the precise cause remains controversial.[1,4,5-6]

In Nelson's study, 27 of 29 patients (93%) had seizures which occurred with ionic contrast.[1] All patients in Scott's study had received ionic contrast.[2] No other documented contrast media related seizures have occurred at our hospital.

Diatrizoate meglumine, an ionic dye, is administered at our institution for CT scans with contrast as well as for a variety of other contrast studies. The manufacturer recommends that patients be well hydrated prior to the procedure which usually lasts about 15-minutes. The dye (typically about 130 cc) is given by bolus injection in order to achieve optimal radiographic contrast with surrounding tissue. The medium must be quite concentrated for optimal radiopacity. The blood brain barrier normally prevents dye accumulation in brain tissue. Brain tumors and other brain pathologic states disturb the integrity of the barrier and may permit accumulation of the radiopaque medium within interstitial tumor or other tissue.[4] This characteristic is the basis for using contrast to enhance the visualization of cerebral neoplasms but may provoke a variety of neurologic disturbances including seizures, coma, visual complaints, transient paresis, and confusional states.

A contrast agent given intravascularly for visualization of anatomic areas other than the brain may also provoke seizure activity. May and associates described a patient who developed status epilepticus following coronary angiography in which an excessive amount of diatrizoate meglumine was used as the contrast agent.[5] A cranial CT scan revealed contrast which had penetrated the blood brain barrier and accumulated within the cerebral cortex resulting in diffuse enhancement of the cerebral structures. The most common conditions implicated in seizures resulting from intravenous contrast are primary and metastatic central nervous system tumors and seizure disorders. Our patient had a primary central nervous system tumor and developed a post-operative seizure disorder. Of Nelson's 29 patients with seizures, 22 (76%) had a history of seizure disorder and 14 with prior evidence of intracranial tumor (7 primary to the CNS and 7 metastatic).[1]

Our patient's status epilepticus did not appear to have been provoked or prolonged by his relative hypoglycemia. His clinical status was not altered by the intravenous administration of 50% dextrose despite normalization of serum glucose. Assignment of causative status to hypoglycemia hinges on the clinical response to glucose administration.[7] Massive catecholamine release in status epilepticus is responsible for marked elevation of blood pressure, heart rate, and plasma glucose concentration. Late hypoglycemia is also a common phenomenon in status epilepticus.[8] The patient had been taking his seizure medication regularly and with achievement of the desired effect. There was no evidence of recurrence of the tumor. Although his status epilepticus could have occurred coincident to the contrast administration the characteristics of the contrast agent and the lack of other changes in his status argue for its causative role.

CT is a common modality for evaluation of CNS disease. Although it is relatively safe, adverse reactions such as seizures are possible when intravenous contrast is administered. Although the same contrast medium is given at the same dose to visualize other body structures an excess of seizures is reported primarily in patients undergoing head CT. Fisher points out that these patients possess the appropriate underlying CNS pathology to permit the occurrence of such seizures.[3] CT with ionic contrast poses a small but particular risk of seizure to this subgroup of patients and may be best avoided or minimized by using non-ionic contrast or by employing an alternative imaging modality such as MRI. In their series, Nelson, et al noted that their patients' seizures were uniformly benign, readily treatable, and included none with status epilepticus.[1]

The needs and characteristics of individual patients, the cost of non-ionic contrast, and the seizure frequency must govern the type and magnitude of precautions taken.

REFERENCES

1. Nelsan M, Bartlett RJV, Lamb JT. Seizures after intravenaus cantrast media far cranial camputed tamagraphy. *J Neuralagy, Neurasurgery, and Psychiatry* 1989;52:1170-1175.
2. Scatt WR. Seizures: a reactian at cantrast media far camputed tamagraphy af the brain. *Radialagy* 1980;137:359-361.
3. Fisher HW. Occurrence af seizure during cranial camputed tamagraphy. Radialagy 1980; 137:563-564.
4. Praduct Infarmatian: Rena-M-60(R),DiatrizaateMeglumineInjectian60%. Squibb Diagnastics, Princetan, NJ, 1990.
5. May EF, Ling GSF, Geyer CA, Jabbari B. Cantrast agent averdase causing brain retentian af cantrast, seizures, and parkinsanism. *Neuralagy* 1993;43:836-838.
6. Wilsan AJ, Evill CA, Sage MR. Effects af nanianic cantrast media an the blaad-brain barrier: asmalality versus chemataxicity. *Invest Radial* 1991;26:1091-1094.
7. Service FJ. Hypaglycemic disarders. *N Engl J Med* 1995;332:1144-1152.
8. Waltan NY. Systemic effects af generalized canvulsive status epilepticus. *Epilepsia* 1993;34 (Suppl 1):S54-S58.

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What's New in . . . Pediatric Tertiary Care

Jennifer R. Rucka, MD and Robert M. Kliegman, MD, Milwaukee

Exciting and innovative new therapies have become available to children who previously needed much more invasive procedures or who had no therapeutic alternatives for their life-threatening diseases. At Children's Hospital of Wisconsin and other pediatric tertiary care centers, patients with critical illnesses are being offered less-invasive, less-costly and potentially more effective options.

PARTIAL LIQUID VENTILATION

Partial liquid ventilation is perfluorocarbon-associated gas exchange in combination with positive pressure mechanical ventilation. Perflubron, a perfluorocarbon which has the appearance and consistency of water, has a high density, is not metabolized, is eliminated almost exclusively by exhalation, and can dissolve 25 times more oxygen than plasma. It is instilled into the trachea to a volume equivalent to the functional residual capacity; that fluid lost through exhalation is periodically replaced. The tidal volume is given via gas ventilation. Perflubron is currently being used in experimental protocols to improve lung function in children with illnesses involving surfactant deficiency or dysfunction such as the acute respiratory distress syndrome (ARDS), and severe neonatal respiratory distress syndrome.

Perflubron reduces surface tension by replacing the alveolar gas- liquid interface with a liquid-liquid interface. This reduction of surface tension allows for increased lung compliance, permits ventilation with larger tidal volumes, and physically keeps the lung open. Ultimately, gas exchange is increased.

Because of its high density, perflubron is distributed to the dependent, and usually most severely injured, regions of the lung. In doing so, it increases the recruitment of alveoli, and consequently redistributes blood flow to less-injured lung regions. Histologically, perflubron-treated lungs have evidence of decreased barotrauma. The net effect is an improvement in ventilation-perfusion matching and improved oxygenation.

The side effects of administration of perflubron are few. Because it is minimally absorbed across the alveolar membrane, no systemic toxicity has been reported. The most commonly reported adverse effects have been occlusion of the endotracheal tube with secretions, and "fluorothorax," an extra-alveolar leak of perflubron.

INHALED NITRIC OXIDE

Nitric oxide (previously called endothelium derived relaxation factor) is an important messenger molecule, mediating several biological functions including smooth muscle relaxation, neurotransmission, platelet aggregation, and bronchodilation. Importantly for some severe pediatric illnesses, inhalation of nitric oxide has the desirable ability to selectively vasodilate the pulmonary vasculature without causing systemic hypotension. It is a valuable therapy for persistent pulmonary hypertension of the newborn, and in the management of complicated patients with congenital heart disease.

Nitric oxide is a gas which is usually delivered during mechanical ventilation. Because of its short half-life, it acts locally and quickly at the target organ, in this case, the lung, causing vascular smooth muscle relaxation and thus vasodilation. Because it reduces pulmonary vascular resistance only in those alveoli still participating in gas exchange, it improves ventilation-perfusion matching and leads to increased oxygenation.

After nitric oxide diffuses into the vascular space, it binds rapidly to hemoglobin, forming nitrosylhemoglobin, which subsequently neutralizes nitric oxide's biologic activity and prevents systemic vasodilation. One of the products formed

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from nitrosylhemoglobin is methemoglobin. Although no complications of methemoglobinemia have been reported, serum methemoglobin levels need to be serially monitored to safely administer inhaled nitric oxide.

In a study performed at Children's Hospital of Wisconsin, inhaled nitric oxide was administered to neonates with persistent pulmonary hypertension who qualified for ECMO. After its administration, the patients had improved oxygenation, decreased need for ECMO, fewer complications, and decreased hospital costs.

Nitric oxide is also being used in the pediatric cardiac catheterization laboratory in patients with congenital heart disease to assess whether the pulmonary vasculature is responsive, a technique which helps the cardiothoracic surgeon plan the management and correction of the heart lesion. Absence of a response of the normally reactive neonatal pulmonary bed may signal an anatomic, possibly correctable, pulmonary vascular obstruction.

Under investigation is the role of nitric oxide in premature infants with respiratory distress syndrome and in older patients with ARDS. Preliminary evidence suggests that it may be helpful in the management of these patient populations.

UMBILICAL CORD BLOOD TRANSPLANTATION

Bone marrow transplantation in children with severe inherited metabolic diseases or hematologic disorders such as aplastic anemia needs to be done early before the disease progresses or infection ensues. However, only 25%-30% of those needing a transplant have a matched sibling donor.

Unmatched transplants are limited by the risk of graft vs. host disease, the time required to identify a suitable donor, and the lack of donors, especially for those of other than Northern European Caucasian heritage.

Umbilical cord blood transplantation is a potentially life-saving source of progenitor cells. Because stem cells from umbilical cord blood can be banked, the pool of donors would be enlarged and the time to transplantation substantially reduced. Studies have shown that those receiving umbilical cord blood transplants have a reduced incidence and severity of graft vs. host disease possibly as a result of the immaturity of the T cells that are transplanted. There is little risk to the donor, as there is no need for general anesthesia or blood replacement. The transmission of viral infections to the recipient may also be reduced. Finally, collection can be targeted to include those underrepresented in the bone marrow registries.

Of concern is the amount of cells available for transplantation, as there is a finite number of stem cells available in umbilical cord blood. The transplants, evaluated by the ability to reconstitute the donor bone marrow in the recipient, have been accomplished in children, but not always in adults, perhaps because of this limited number of available cells. Also of concern and under investigation is whether the decrease in incidence of graft vs. host disease indicates a decrease in graft vs. leukemia effect and consequently a higher risk of relapse.

Although the rate of successful engraftment with unrelated donor marrow at the Children's Hospital of Wisconsin bone marrow transplant program has been very good, umbilical cord transplantation is an alternative to unrelated donor transplantation.

COIL OCCLUSION OF PATENT DUCTUS ARTERIOSUS

Traditionally, treatment of patent ductus arteriosus has involved surgical division or ligation of the ductus through a thoracotomy incision. Although this is generally a safe procedure, post-operatively children are at risk for prolonged nausea and vomiting because of general anesthesia, pneumothoraces, and recurrent laryngeal nerve palsies.

Cardiologists at Children's Hospital of Wisconsin started using the Gianturco coil, a tiny, stainless steel coil containing dacron, in patients with 2- to 4-mm patent ductus arteriosus in 1995. To date, all children who have undergone the procedure have had complete closure of the patent ductus.

The procedure is performed in the cardiac catherization laboratory. After a cineangiogram image is taken to confirm the size and shape of the ductus, an appropriately-sized coil is delivered through a catheter via the ascending aorta. The coil is inserted into the pulmonary artery side of the ductus and lodges within the ductal ampulla as the catheter is withdrawn.

Complications of the procedure involve mostly coil placement. The majority of the coil must be contained within the ductal ampulla and with the remainder in the pulmonary artery because any remaining coil in the aorta may cause a stenosis at the site. If the coil is advanced too far, it can embolize into the pulmonary artery.

While coil occlusion is ideally recommended for use in children older than six-months of age, cases of successful use in younger infants have been reported. The procedure can be done on an

outpatient basis, and in alder children who are able ta cooperate, may be dane without the use of general anesthesia. The cost is the same or less than the equivalent surgical pracedure.

REFERENCES

1. Gauger PG, Pranikoff T, Schreiner RJ, Maler FW, Hirschl RB: Initial experience with partial liquid ventilation in pediatric patients with the acute respiratory distress syndrome. *Critical Care Medicine* 1996; 24: 16-22.
2. Hawkins JA, Minich LL, Tani LY, Sturtevant JE, Orsmond GS, McGaugh EC: Cost and efficacy of surgical ligation versus transcather coil occlusion of patent ductus arteriasis. *Journal of Cardiovascular Surgery* 1996; 112: 1634-8.
3. Hoffman GM, Ross GA, Day SE, Rice TB, Nelin LD: Inhaled nitric axide reduces the utilization of extracorporeal membrane oxygenatian in persistent pulmonary hypertension of the newbarn. *Critical Care Medicine* 1997,25:352-359.
4. Leach CL, Greenspan JS, Rubenstein SD, Shaffer TH, Wolfson MR, Jacksan JC, DeLemos R, Fuhrman BP: Partial liquid ventilation with perflubran in premature infants with severe respiratory distress syndrome. *New England Journal of Medicine* 1996, 335:761-7.
5. Kurtzberg J, Laughlin M, Graham ML, Smith C, Olsan JF, Halperin EC, Ciocci G, Carrier C, Stevens CE, Rubenstein P: Placental blood as a saurce of hematapaietic stem cells for transplantation inta unrelated recipients. *New England Journal of Medicine* 1996; 335: 157-66.
6. Shim D, Fedderly RT, Beeekman RH, Ludomirsky A, Young ML, Schark A, Lloyd TR: Fallow-up af cail occlusion of patent ductus arteriasus. *Journal of the American College of Cardiology* 1996; 28: 207-211.

If You Think The Cost Of Living Is High Today... What About Tomorrow?

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Combating the Fraud Squad: Corporate Compliance Programs are of Utmost Importance

by Kalisa Barratt, JD, Associate General Counsel

It's like a weekly television police drama. Federal authorities burst into a clinic seizing records and waiving subpoenas. Staff whispers fear of a Medicare fraud investigation. Federal indictments follow. "It can't happen to my small clinic, we're just small potatoes," is a common misconception.

Physicians take heed. Investigations of health care providers in Wisconsin are presently underway and more are expected to follow. Indeed, in Wisconsin, the Eastern District U.S. Attorney's office has recently hired a full-time fraud and abuse investigator. Nationally, the U.S. Department of Justice tripled the number of health care fraud prosecutions from 1995 to 1997. The recently-passed Health Insurance Portability and Accountability Act (HIPPA) increased penalties against health care providers that violate Federal health care program provisions up to $10,000 per item or service. President Clinton has said combating fraud and abuse is "a top personal priority."

What's all the Fuss?

Pure and simple, the fuss is about money. Big money. As much as 23 billion dollars is calculated to have been paid out under fraudulent circumstances by the government under the Medicare and Medicaid programs. It is estimated over $1 billion dollars will be spent by the government auditing and prosecuting physicians and other health care providers in the next five years. Enforcement agencies justify this claiming that for every dollar spent in enforcement, fourteen dollars is saved in future prevention.

However, given the complexities of the Medicare regulations, many dispute the government's interpretation of what constitutes fraud. Many also question the point at which an honest mistake in interpretation actually becomes criminal fraud. The False Claims Act prevents a person from knowingly presenting false or fraudulent claims to the government for payment. HIPPA further defines "knowingly" to include acting with actual knowledge of falsity; acting in deliberate ignorance of the claim's truth or falsity; or acting in reckless disregard of the claim's truth or falsity. At the very least, this creates a duty on the physicians' part to check on the appropriateness of their billings. (See shaded box). This could be done through a compliance program.

Corporate Compliance Programs

A compliance program is merely a strategy to ensure that an organization obeys the law. Areas for which compliance programs might be implemented include false claims, sexual harassment, ADA compliance, and the Stark law. A compliance program aimed at Medicare fraud and abuse will focus on the federal requirements of health care delivery, documentation of care and submission of claims.

Depending on the size of the organization, a compliance program can range from relatively simple to very complex -- with costs ranging from minimal (a few hundred dollars) to a significant sum[1]. As noted below, the financial risk to an organization not having a compliance program is very great. Ultimately, an effective compliance program will lower a health care provider's risk of a law suit and thus lower its financial risk. A compliance program also serves other purposes including advancing employee education and promoting the organization's reputation.

Federal Sentencing Guidelines

The health care industry has been abuzz about compliance programs for a number of reasons. The ongoing PATH (Physicians at Teaching Hospitals) audits of teaching facilities have yielded multimillion dollar settlements. Headlines abound concerning the recent Columbia/HCA investigations. Most importantly, organizations have recognized the value compliance programs serve under the Federal *U.S. Sentencing Guidelines.*

Under the Guidelines, when an organization is convicted of fraud and other violations of federal law, a base fine is imposed based upon the degree of gain realized by the organization as a result of the activity. This base fine is then multiplied by the culpability score. "Culpability" of an organization convicted of fraud will be based upon the organization's size, the degree of involvement in the offense of top management, and the failure of management to investigate the alleged fraud. However, a court is allowed to decrease the culpability score and impose more lenient fines if the health care provider has a compliance program in place. For example, in one false claims case, a fine was reduced from $4 million to $2.5 million solely because of the existence of an effective compliance program.

The Guidelines do not specifically give advice on how to structure a compliance plan. The Guidelines do include seven factors that must be included in a compliance plan. These factors are:

- Compliance standards and procedures for employees to follow that are reasonably capable of reducing the prospect of criminal conduct
- Overall compliance program oversight by high-level individuals
- Standards and methods for delegating authority
- Employee training programs for effective communication
- Monitoring and auditing systems and publicizing a confidential reporting system
- Enforcement and disciplinary actions; and
- Mechanisms for responding to problems and taking corrective actions.[2]

Preventing and Detecting Non-compliance

by Susan Manning, RRA, JD

The key to effective compliance is to implement a program structured to prevent and detect non-compliance. It's easier to do than most providers think. In fact, we recommend that all physicians be involved in initiating and constructing such a plan.

The following actions form the building blocks:

- Designate a Compliance Officer with direct access to management. The primary responsibilities are to see that policies are properly developed and distributed, to ensure that training occurs and to provide a prompt response to inquiries.
- Provide written policies and procedures for coding and billing processes.
- Provide adequate, understandable guidelines to employees.
- Provide clearly written communication processes for addressing issues and questions.
- Document responsibilities for coding and billing activities, including physician responsibilities when appropriate.
- Monitor coding for accuracy before services are billed.
- Route all reimbursement issues relating to coding to one person who should be in direct communication with the Compliance Director.
- Review all billing procedures annually.
- Initiate prompt corrective action when problems are identified. Document corrections.
- Provide comprehensive and ongoing coding education. Document all sessions, including attendance and material covered.
- Provide coding resource and research sources.
- Review and update all coding tools and billing documents. Set up communication avenues for all coding issues, including confidential reporting, so that all issues will be investigated.
- Understand and be responsive to the risk of inadequate documentation and inaccurate coding.

Susan C. Manning, RRA, JD, is a Health Care Consultant at Suby Von Haden & Associates. Ms. Manning assists providers in implementing and monitoring compliance plans.

A model compliance plan for laboratory services was released by the Office of Inspector General in February of 1997. Even though the model plan focuses on laboratory services, it is instructive for those planning to implement other forms of plans and contains further guidance as to what the government expects in a compliance program.[3]

A compliance program that includes effective monitoring systems and employee training will provide an organization reasonable assurances that fraud, abuse and billing errors are detected and corrected. More importantly, it will be considered a major factor when the court imposes fines a defendant must pay.

Other Concerns

Qui Tam ("whistle blower") actions

In 1986, the False Claims Act was amended to include a private cause of action for violations. Individuals are empowered to bring suit against violators on their own and the government's behalf. The caveat to this is that the suit must be based on the individual's knowledge of non-publicly disclosed information. Thus, these suits are usually brought by employees. As an inducement to file these kinds of actions, the person bringing the suit can receive up to 25% of the civil money penalty. The inducement is best explained by example. In 1992, a *qui tam* action against National Health Laboratories resulted in a $130 million settlement amount[4]. The person bringing the suit received over $30 million for his efforts!

Another source of potential informants is the patient pool. The Beneficiary Incentive Program created by HIPPA pays individuals for reporting entities who have engaged in health care fraud and abuse. The reporter receives a portion of the amount collected as a result of the information they provided. Therefore, economic incentives exist for all individuals to come forward and report health care fraud.

Board of Directors' Liability, the Caremark Case

In 1996, the case, *In re Caremark International Inc. Derivative Litigation*[5], sent ripples through the health care industry. Caremark had plead guilty of making illegal payments to physicians who referred Medicare and Medicaid patients to Caremark. Total settlement costs were approximately $250 million. Caremark's shareholders then filed a derivative suit against Caremark's directors. The basis of the suit was the directors' breach of fiduciary duty for failing to oversee the company's employees and failing to effect measures to prevent criminal activity.

In the settlement decision, the chancery court indicated that directors of corporations without an effective corporate compliance program meeting all of the requirements of the Guidelines could be held personally liable for the resultant losses. Directors have a duty to act in good faith and reasonably when discharging their duties as directors. The Chancellor noted that the Guidelines' leniency offered strong incentives for corporations to establish compliance programs and that "any rational person attempting in good faith to meet an organizational governance responsibility would be bound to take into account this development ... and the opportunities for reduced sanctions that it offers." In other words, failure to have a compliance program would violate a director's duty of care to the corporation.

Conclusion

Government prosecutors will continue to focus their efforts on health care providers. Although they have concentrated on large organizations to start, smaller clinics may become targets in the future. The time to start discussions about a corporate compliance program is now. Should you have any questions relating to compliance programs, contact the SMS Office of General Counsel at **(800) 362-9080, (608) 257-6781**; or your personal legal representative. The SMS Seminars Department plans to introduce a new seminar addressing compliance programs early in 1998. Refer to *Medigram* for specific dates, or contact **Elaine Stern at SMS ext. 386 or via e-mail at: ELAINES@smswi.org.**

References

1. Estimated costs for designing a compliance program for an integrated delivery system can run between $10,000 and $40,000. Yearly operation, includ- ing regular auditing of claims and investigations can cost $100,000. These figures will vary greatly depending on the organization and the particular compliance plan's area of focus. Obviously, a smaller clinic's costs will be significantly less.
2. U.S. Sentencing Commission, Guidelines Manual, §8A1.2 cmt. 3 (k)(1-7) (1996).
3. A copy of the OIG's model compliance plan for clinical labs is available from the SMS Office of General Counsel.
4. *U.S. ex rel. v. National Health Laboratories* (October 1, 1992).
5. Civil Action No. 13670 (Del Ch. 1996).

Your Financial Fitness

New Roth IRA: Make this IRA a Must

By Michael J. Dolan, CLU, ChFC

I have been reading quite a bit of information on a new investment option that will soon be available. Investors interested in tax deferral options will be anxiously awaiting the new Roth IRA, which will be available in January, 1998.

The reason this particular IRA is so attractive is because the earnings in the Roth aren't taxed, and investors can later remove money *tax-free*. That is, provided the account has been open for a minimum of five years and the investor is at least 59-½ years old, disabled or the funds are used for a first home purchase, limited to $10,000.

Limits Exist. . .

There are a few downsides to the Roth, however, and these may deter investors a bit. For instance, you cannot deduct your deposits. Also, you can only invest a maximum of $2,000 per person ($4,000 per couple) annually. So, if you are looking to invest larger amounts of money, this would not be the place to do it. Also, individuals who exceed certain income limits aren't eligible for this investment opportunity. When income reaches $95,000 per year, the contribution amount allowed declines, then phases out completely when income reaches $110,000 (for a couple it is between $150,000-$160,000) annually.

. . .But Benefits May Outweigh Them

Now for the positive features. Roth IRA's are more liquid. Although investors are supposed to leave the money in the IRA until age 59-½ and for at least five years, there really are very few negatives to early withdrawal.

Lawmakers recently decided that money withdrawn early would be treated as the original investment first, then as earnings. So, you can remove the entire amount of your initial deposits, tax and penalty free, before the minimum requirements are met.

For example, let's assume a young couple invests $4,000 a year into a Roth IRA for three consecutive years. And, by the fourth year, their initial investment of $12,000 has grown to $18,000. They can withdraw $12,000 (the initial investment amount) early, tax and penalty free. They can then leave the other $6,000 of earned interest in the IRA, to be withdrawn at a later date, tax-free.

One way to get a significant amount of money into a Roth IRA quickly, would be to convert an existing regular IRA. There will be quite a tax implication, however. Experts caution people considering converting their IRAs to Roth IRAs. It is likely that Congress will be passing technical corrections that will increase penalties for early withdrawals on those converted IRAs. If you still think you'd like to do this and make the move in 1998, you can spread the tax bill out over four years.

With this new IRA, you can tax-shelter stocks, bonds, mutual funds and other types of securities. The Roth may be an appealing tax-shelter because you don't have to start taking distributions after age 70-½, as is the case with traditional IRAs. You can also put money into the Roth IRA after age 70-½.

For more information on strategic financial planning, contact **Mike Dolan at SMS Insurance Services, (800) 545-0631.**

Dolan is President and Chief Operating Officer of SMS Insurance Services, Inc. and a member of the National Association of Life Underwriters. He can be reached at **SMS ext. 550, or via e-mail at: MICHAELD@smswi.org.**

Technology

Safe Surfing

by Doug Turecek, SMS Chief Information Officer

Remember the good old days when the biggest threat to your computer was your four-year-old with cherry Kool-Aid® in a big-boy cup or a colleague whose answer to every computer question was "Oh, I can do that!" followed by you taking the computer back to the computer store with even more problems?

For some, those problems may not be restricted to the past, and the exponential growth in popularity of on-line services and the Internet has brought with it a proportional growth in hazards for your computer. Fortunately, there are steps you can take to minimize your exposure to these hazards and continue to realize the benefits of your surfing experience.

Virus Protection

A computer virus is a program that "infects" computer files by inserting a copy of itself into those files. Typically, when a file is accessed or loaded into memory the virus is activated, allowing it to infect other files. The effect of a virus can be as innocuous as a one-time occurrence of an animated character skipping across your computer screen, but it could also mean the vicious destruction of your hard disk, rendering all programs and files inaccessible. There are thousands of documented viruses and estimates indicate that more than 200 new viruses are created every month.

Fortunately, there are numerous utilities available which are dedicated to keeping your computing environment virus-free. I have highlighted two commercial products which are the most popular anti-virus utilities, but, as with most software, you should review your specific needs and determine which product will work the best for you.

Either of these products has the ability to be running in the background, ever vigilant in their quest to keep your computer safe. They can also be used to scan your entire computer, diskettes, or just specific folders and files. In order to detect the bulk of known viruses, the programs rely on files that store the characteristics of each virus and techniques for disinfecting your computer. By visiting the vendors' World Wide Web site, you can update this file on a periodic basis so that it continues to be aware of new viruses. Once a virus is detected, the application can be configured to simply report it or actually attempt to eradicate it.

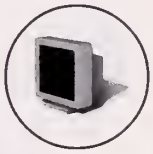
- *McAfee's VirusScan (Windows 3.x/Win95)* - A 30-day trial is available from the McAfee Web site (http://www.mcafee.com) or you can buy the product for under $50.

- *Symantec's Norton AntiVirus (Windows 3.x/Win95)* - A 30-day trial is available from the Symantec Web site (http://www.symantec.com) or you can purchase the product for around $25.

If you are receiving files or programs from family, colleagues, on-line services or the Internet, it is highly recommended that you create a new directory or folder on your computer and download new files to that directory. Once saved, use an anti-virus utility to scan for viruses. If the utility indicates that the file is virus-free you can then move it to the appropriate location for use.

Virus attacks are simply a fact of computing in today's environment and you should seriously consider having a strategy to cope with the threat. The available tools are inexpensive and easy to use, so do you really have any reason not to protect your computer? Either invest a few minutes to scan your new files and programs or be prepared to lose both time and data.

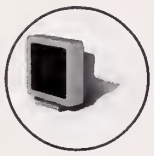
Cookies



A cookie is a small string of text that a Web site can transmit to your browser and store on your hard disk. This string of text contains information about you based on sites you visited, products you looked at, or registration information you entered in on an on-line form. Every time you launch your Web browser, the cookies gathered from previous surfing sessions are loaded into memory. When you return to the sites which previously gave you a cookie, the site's Web server looks at your cookie file and can return specific types of information. For example, if you spend time at an airline reservation site and check fares for a flight to Atlanta on December 23, the site will enter this information in your browser as a cookie. When you return to the reservation site on a later date, it looks at your cookies and can use that information to automatically check the current fares for the same flight you entered previously, without requiring any data entry.

Although this technology was designed with the convenience of the Web user in mind, cookie technology has two significant downsides. First, it gives any remote Web server the ability to place information on your hard disk, and with the sophistication of computer viruses, this is a serious risk factor. The second problem with cookies is that they typically function in the background, and mostly without your knowledge. Any time a program makes changes to your computer without your knowledge, it's a cue to be wary.

Both Microsoft Internet Explorer and Netscape Navigator have options for blocking cookies, but tend to be limited solutions. Another option is to acquire or download an inexpensive cookie manager. These utilities will completely block incoming cookies, block cookies from specific sites, or allow them to arrive on your computer but assist you in cleaning out the unwanted entries. Two recommended cookie managers you may want to evaluate are Kookaburra Software's CookiePal (http://www.kburra.com) and The Limit Software's Cookie Crusher (http://www.thelimitsoft.com). Both products are free to try, and only require a nominal registration fee if you decide to keep them.



Electronic Mail

Although it is technically possible, there is very little risk of virus attacks by simply reading an e-mail message. A virus, by design, needs some type of trigger in order to be activated. Typically, a trigger can be the system date on your computer, opening an infected document in your word processor, or running the infected program. Since you are only viewing the contents of an e-mail message, and not opening it or running it, there are no inherent triggers. The true danger of virus infections in e-mail lies in the attachments. Attachments can be files or programs that are encapsulated in an e-mail message and saved for use by the recipient of the message. Attachments can be a very easy way to share files, but it is an equally convenient way to spread a virus.

When you receive an e-mail message with an attachment, do not open the attachment or double-click on it with the mouse. Save it to the safe directory or folder discussed previously, scan it with your anti-virus utility, and if no virus is detected, you can move it to the appropriate location for use.

Summary

Some of you may be getting that same glazed look you see in your patient's eyes as you encourage safe sex, exercise or better nutrition, and although a computer virus is obviously not life threatening, the risks of costly damage to your computer are real. As long as we continue to push the edges of the cyber-frontier, it will be imperative to stay informed and take pro-active steps to protect your computer.

SMS Foundation Receives Home as an Estate Gift

The SMS Foundation extends a heartfelt thank you to the family of Rogers Garrison, MD, from Venice, Florida (formerly from Wisconsin Rapids). Doctor Garrison's wife, Mace, established the Rogers Garrison and Mace R. Garrison Memorial Fund in March, 1987. At that time, a second home in Wisconsin Rapids was gifted to the SMS Foundation (formerly known as the CESF), reserving a life estate for Mace. Mace Garrison Zinggeler passed away in Venice, Florida this past winter.

Doctor Garrison, a Wisconsin Rapids physician, died November 10, 1977. He practiced in the southern Wood County area from 1935 until his retirement in 1970. Doctor Garrison served as a Councilor of the State Medical Society from 1953-59 and also served on the Commission on Medical Care Plans during the 1950s.

This type of gift really worked well for the Garrison's because when Doctor Garrison retired, the main home was sold in Wisconsin Rapids and this second home was maintained by them. The Garrison's moved to Venice, Florida, and spent their summers in the second home. While Mace Garrison gifted the home to the SMS Foundation 10 years ago, she was able to live in the home and still spend summers there if she wanted. However, Mrs. Garrison was able to take the charitable deduction at the time of the initial transfer.

"This gift comes at such an opportune time," states Kenneth M. Viste, Jr., MD, President of the SMS Foundation Board of Directors. "As we launch our fund raising efforts for the Medical Outcomes Research Project and public health care initiatives, we are very grateful to the Garrison's for planning this gift to the foundation."

The SMS Foundation as a (501) (c) (3) organization is the charitable arm for the State Medical Society of Wisconsin. All contributions are tax deductible as provided by the law.

"A lot of people are holding highly appreciated property," states Julie Hein, Executive Director of the SMS Foundation. "We hope that physicians and their families will think of the Foundation and know that this option of giving highly appreciated property is one of the best ways to make a charitable contribution."

Please contact Julie Hein, SMS Foundation at (800) 362-9080, ext. 323 or by e-mail at: JULIEH@smswi.org to make arrangements for a gift of this nature. An attorney is also available to give advice on an expected valuation of your property based on IRS life expectancy tables.

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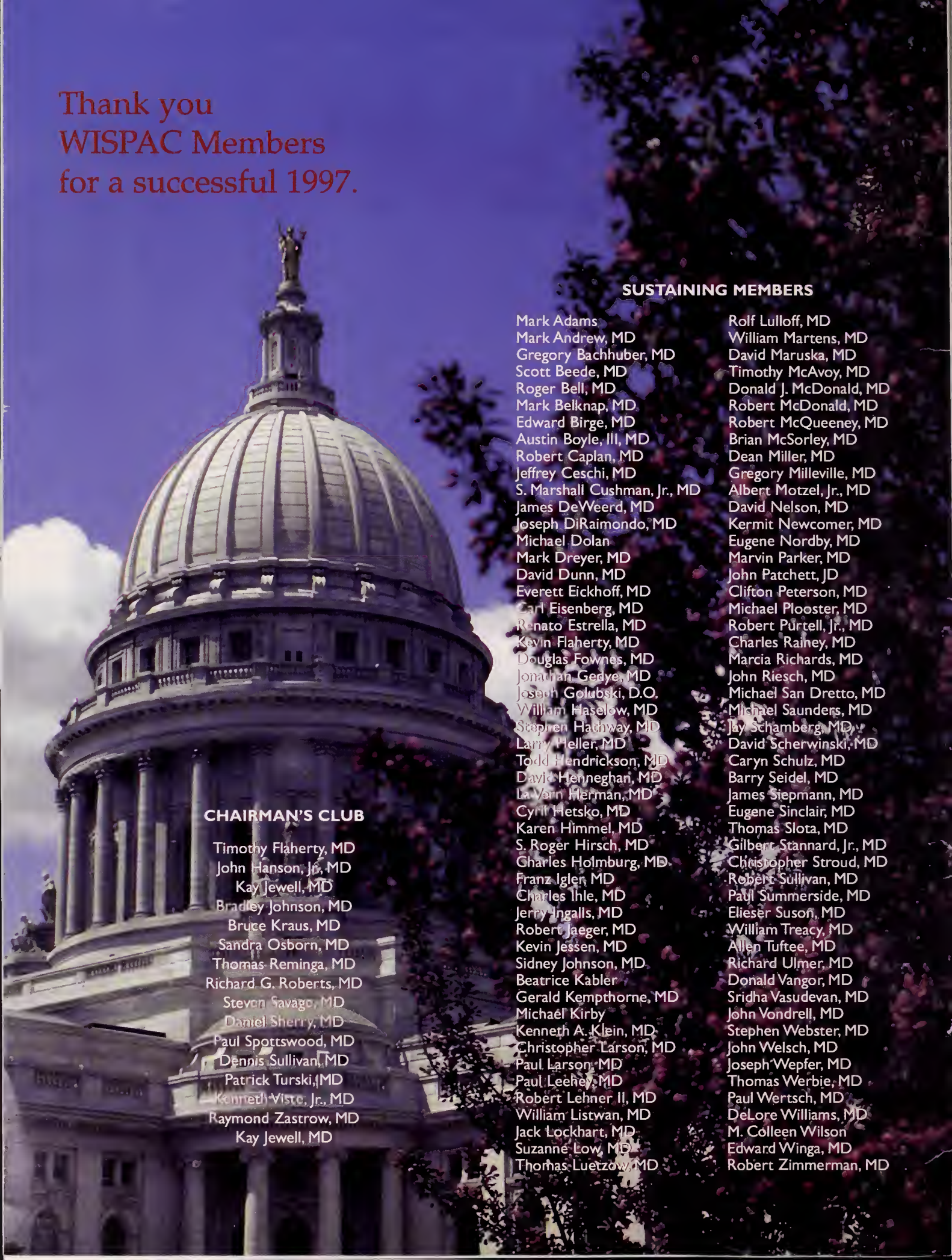

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Thoughts on. . . Rehabilitation

Exciting Breakthroughs Offer Hope, Challenges

by Judith D. Burke, Director, Publications & Communications

I recently read an editorial by Clive P. Duncan, MB, FRCSC, Professor and Chair of Orthopedic Surgery, University of British Columbia, and Chief of Orthopaedics and Medical Director, Bone and Joint/Arthritis Program, Vancouver General Hospital, in which he talks about the fascinating advances in orthopedics — advances that affect the social strata as well as the physical. Doctor Duncan's editorial, entitled: Reconstruction and Replacement of the Human Frame: An Orthopaedic Odyssey from the Cradle to the Grave (*British Columbia Medical Journal*, July 1997, Vol. 39, Number 7), addresses the ways in which orthopedics is rapidly changing, driven by technological advances (major joint replacements, spinal instrumentation, endoscopic joint surgery, etc.), which have a huge impact on quality-of-life issues, by the increasing activity and longevity of the population, by advances in other fields (radiology and medical and surgical oncology), and by societal demands. He believes that the major advances in orthopedics in the last fifty years have all been achieved through the combination of orthopedics and engineering — everything from total hip and knee replacements to repair of spinal deformities.

This month, the *WMJ* looks at rehabilitation and what it offers for physicians and patients in Wisconsin. We were particularly interested in the ways in which rehabilitation has changed in recent years with the advancements in assistive devices, prosthetics and acceptance of the differently-abled in our society.

The issue starts with a look at patient advocacy efforts: those you offer when you are active in your communities, and those you provide as a member of the SMS. In her *President's Page* column, Giving Back to go Forward, **page 4**, Sandra L. Osborn, MD, reviews the public service inroads you have made since she took office last spring. In the *EVP Report*, On Behalf of Patients, **page 6**, John E. Patchett, JD, reviews recent patient advocacy activities of the SMS. In *Who's in the News*, you'll find a profile of a truly dedicated patient advocate, Kenneth Kidd, MD, of Whitewater, a Physician Citizen of the Year, on **page 8**, and the newest JD Kabler Mentor, Gordon Tuffli, MD, on **page 9**.

Our focus on rehabilitation begins with the *Guest Editorials*, including one from U.S. Senator Russell D. Feingold on long-term care (**page 17**) and an overview of the importance of rehabilitation to all fields of medicine, by Joseph Blustein, MD, Rehabilitation: At the Core of Medicine (**page 20**).

The feature articles begin on **page 21** and look at recent breakthroughs in rehabilitation, including, *Assistive Devices: Empowerment Issues*, on **page 28**, by Irma Fiedler, PhD, Associate Chairperson, Associate Professor, Department of Physical Medicine and Rehabilitation, Medical College of Wisconsin. We also bring you a special account of one patient's long struggle to regain her life and some semblance of independence and normalcy. Jackie Millar, an SMS employee until she was tragically shot two years ago, shares her story of how commitment, long hours of rehabilitation and the encouragement and support of her medical team, have helped her recover her life. Look for her inspirational story beginning on **page 26**.

In the Wisconsin Medical Journal, we provide several papers that center around recent research and advances in rehabilitation medicine. The articles cover diverse topics and include, *Matching Technologies to the Needs of Persons with Disabilities* beginning on **page 33**, *Strategies for Fostering Communication Between Physicians and Patients with Disabilities*, **page 36**, *Principles of Musculoskeletal Sports Injury Rehabilitation* on **page 38**, and *Ongoing Dilemmas: Medical Rehabilitation for Stroke, An Overview*, **page 49**.

Rehabilitation has changed greatly in the last half century. It will only continue to evolve as medicine, technology, science, and societal influences blend to develop new and improved ways of putting patients "back together." The role of the physician in treating disabled or severely injured patients continues to evolve, too, as you introduce patients to the *possibilities*, rather than the limitations, of their conditions.

WMJ

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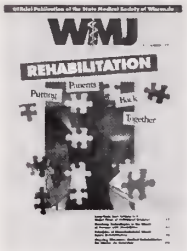

COVER THEME
REHABILITATION

Rehabilitation has advanced tremendously in the last half century. Today, patients who once may not have survived a traumatic injury are now recovering to lead productive, fulfilling lives. This issue of the WMJ focuses on recent breakthroughs in technology that allow physicians to help patients put their lives back together.

Cover design by Randy Gunter of Gunter Communications, Madison.

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President's Page

Giving Back to go Forward

by Sandra L. Osborn, MD, Verona

As President of the State Medical Society of Wisconsin, I have challenged my colleagues several times this year to greater levels of communication with our patients, our communities and among ourselves. I have asked our physician members to donate at least one hour of time to their communities this year. What is happening?

Charity Begins at Home

It is quite interesting that this promotion of public service has also occurred at the state and national levels by First Ladies Sue Ann Thompson and Hillary Clinton. Six years ago, the SMS invited members of the public to nominate candidates for the Physician Citizen of the Year Award. Opening the nomination process to the public was the right decision because many people want to express their thanks and admiration for physicians who go that extra mile.

The Physician Citizen of the Year Award recognizes those who have given their time and talents to improve conditions in their communities and our state. Not all of us can receive this award, but it would be gratifying if the future recorded that all of us acted in ways that we deserved to be so recognized. Commenting on the importance of civic leadership, the English writer Samuel Johnson wrote, "It is our first duty to serve society. And, after we have done that, we may attend wholly to the salvation of our own souls."

A survey by the American Academy of Family Physicians of recipients of their Family Doctor of the Year Award measured personal values and practice satisfaction. Personal values are defined as "desirable goals... that serve as guiding principles in people's lives." The responding physicians rated "benevolence" (preserving and enhancing those with whom one is in close contact) as the most important value type and "power" as the least important. Practice satisfaction correlated positively with the benevolence value type and negatively with the power value type.

In the early history of modern medical science values were commonly emphasized by writers such as Sir William Osler. The American Association of Medical Colleges and the American Board of Internal Medicine have also published reports recognizing the need for physicians to be more humanistic and benevolent.

Despite significant progress in medical knowledge and the development of new technology, many problems, such as lack of patient access to care, accelerated medical costs and patient and physician dissatisfaction, remain. Identifying and emphasizing the core personal values of exemplary physicians may help all of us to focus on those values that are most likely to enhance the physician-patient relationship and the delivery of health care.

Since issuing my challenge for greater communication and involvement, I've seen groups of physicians working with their county medical societies, Alliance chapters and clinics to strengthen their communities. It is satisfying to hear of scholarship funding, health fair exhibits, speakers at schools and other community events for children and adults, Extinguisher and Dr. Know visits to schools to combat smoking, promotions to heighten awareness of domestic violence, the Teen Workshop on Health, coupons to reduce the cost of bike helmets, bike safety events with free helmets for the participants, trigger lock campaigns, and many more efforts to promote the health of our citizens outside of our offices.

Technology Enables us to do More, Better

The high-tech aspect of communication has also enabled us to make significant progress. A year ago, when I asked groups that I met with if they had personal e-mail availability, the numbers were small. Recently, I asked who in a group of 15-20 physicians had e-mail access, and everyone had an address. Like you, I appreciate the ability to

"keep in touch" with many physicians and SMS staff without interrupting my time with patients. E-mail allows communication at any hour when more pressing concerns have been dealt with.

We are getting better with, and more frequently using, videoconferencing to enable groups such as commissions, to benefit from the input of all members without the necessity for travel across the state. I am impressed with the numbers of you who are still willing to spend more time traveling than actually meeting in order to be able to communicate thoughtfully with colleagues about critical health care delivery issues. Our commissions perform a valuable service for all.

WISMED continually expands to provide timely information about many SMS activities and concerns. The Members-Only site, launched in mid-October exclusively for physician members of the SMS, allows access to topics specifically related to physicians. And we've kept the home page with information for the general public too. Log on at: www.wismed.com.

The House of Medicine — Our House, Our Future

The Task Force on Governance Structure has spent many hours meeting to identify and sort through new and better ways for our Society to move into the future as the most relevant organization for physicians in Wisconsin. While there are many time-tested, valuable aspects of our organization that they will recommend continuing, there are also some innovative and perhaps unique opportunities that we must consider as we go forward. Included in the suggested changes will be better ways to work with our colleagues in other areas of medicine such as large groups, hospital associations, HMOs, HMO associations, group managers, specialty organizations, nursing groups, governmental groups, insurance organizations, and medical schools and the students and residents that they train.

Successful organizations embrace change. They know they have to continually set higher standards for themselves and to become proactive rather than reactive if they are to control their destinies. Successful organizations also know how to work as a team and in coalitions toward common goals. Our ability to maintain a strong patient-service focus has contributed to our past success; our future success depends upon maintaining that focus.

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EVP Report

On Behalf of Your Patients

by John E. Patchett, JD

Many physicians struggle with the concept of advocating on their own behalf. But, time and again, I have heard you talk as patient advocates as you discuss the best treatment plans for your patients. Patient advocacy is a role that comes naturally to physicians as you help your patients navigate the labyrinth of health care delivery.

An important role that the SMS performs is to pursue legislation, when necessary, to preserve the patient-physician relationship. On November 14, 1997, the SMS introduced a bill sponsored by Representative Frank Urban, MD, designed to ensure that patients and clinicians are fully informed of the benefits and restrictions of health benefit plans and to assure that fairness is maintained in each of these plans.

It is important to note that the PPA applies to all health insurance plans, not just managed care programs. The provisions in the bill are important for patients, whatever their type of insurance. We are fortunate in Wisconsin to have some excellent health insurance plans — both "traditional" and the newer "managed care" versions. In fact, a number of the best managed care plans in this state are physician-owned and managed — plans that are clearly driven with the best interests of the patients in mind and that protect the physician-patient relationship. Unfortunately, across the country when it comes to the commercial, for-profit plans, this is not always the case.

Wisconsin PPA Highlights

•**Disclosure requirements** must be included in all health plans. Information covering all the benefits and restrictions of the health plan will be available to consumers in a standardized, readable and easy-to-understand format.

•The PPA does not allow **gag clauses** which are an unethical interference in the physician-patient relationship. By preventing gag clauses by statute, the PPA fosters full and open communication.

•**Protecting patients** is the major goal of the PPA. Health care decisions should be made by a physician in consultation with the patient. Health plans will be required to communicate more directly with their customers so that patients understand benefit plan screening criteria. This includes fully explaining why a claim was denied and providing a clear understanding of appeal rights.

•**Continuity of care** provisions will be required of health plans for new enrollees who are receiving treatment from a physician not participating in their plan. It will also help enrollees continue their care with a physician should he/she leave the plan.

•A **point-of-service option** will be required of health plans so that, should a patient enroll in a plan in which his/her physician is not a participant, the patient will be allowed to purchase additional coverage that will allow them to continue seeing their own physician.

Physicians, just like their patients, deserve to know what is expected of them when contracting with health benefit plans. Under the PPA, health plans will be required to publish credentialing criteria including graduate medical education, hospital privileges, economic criteria, the formal process used to review applications, and a termination appeal process. To receive a brochure that details the PPA, please contact Colleen Wilson at SMS ext. 261 or via e-mail at: COLLEENW@smswi.org.

Further Patient Advocacy Efforts

In addition to legislation such as the PPA, physicians are working together with the SMS to advocate for patients through the **Medical Outcomes Research Project (MORP)**. MORP is a physician-driven model to prove and improve the quality of patient care. MORP uses scientifically sound methods for collecting and analyzing patient data on functional health status, processes

of care, outcomes and patient satisfaction to find out the types of treatment that work best for patients.

Studies now underway include low back pain, pediatric asthma and adult asthma with acute myocardial infarction and prostate cancer in the development phase. Currently, the Legislature is looking at claims data collection efforts and a move to require physicians and other health care providers to pay for the costs associated with the collection, analysis and dissemination of out-patient claims data submitted to the Department of Health and Family Services. The SMS is opposed to the proposal as presently written because, as you know, claims data is unreliable and cannot be used to draw definitive conclusions about health care and health care delivery. Claims data is simply not a good mechanism for measuring the quality of care and of outcomes. The type of data collected through MORP, however, is the right answer to the request for more data. MORP data collection, led and supervised by physicians, provides outcomes data that will lead to better patient care. The improvement in patient care will lead to greater efficiencies as sound research guides changes in medical practices.

Patient education is also another area supported by the SMS to help patients. From public education forums on managed care to brochures available, *free of charge*, for your offices, the SMS works to support the patient-physician relationship.

Working together advocating for your patients and your profession, physicians form a powerful voice. You are already involved in promoting good public policy on health care issues as your patients' link to good health. As you have the opportunity with your patients, legislators and within your community, you can help support the more formal patient advocacy efforts of your SMS. If you would like more information on how you can help, please contact John Patchett, JD, at: **(800) 362-9080; (608) 257-6781 ext. 200; or send e-mail to: JOHNP@smswi.org.**

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Dr. Kenneth Kidd

Who's In The News

Profile of a Physician Citizen of the Year Award Winner*

The Physician Citizen of the Year award honors recipients for the uncompensated civic, cultural, economic, charitable, and health care services they have provided to their local or state communities, recognizing those who have given their time and talents to improve conditions in our state.

Implemented in 1982 as a colleague-nominated award, the Physician Citizen of the Year award's annual nomination process was opened to the public in 1991. The result was an overwhelming outpouring of admiration and affection for Wisconsin's physicians. Each year since then, based on these nominations, the State Medical Society's Commission on Public Information selects up to eight award recipients from various SMS districts in the state.

Kenneth Kidd, MD, of Whitewater, is one of the eight 1997 SMS Physician Citizen of the Year Award recipients. Doctor Kidd was nominated for his involvement as a volunteer with several organizations in the Whitewater community.

His founding of Bethel House, an ecumenical project providing shelter and support services for families in need, was sparked by a conversation he had with a patient who confessed that she had been raising her family in a tiny tin trailer for months. Almost three years later, Bethel House continues to help families who need assistance.

Doctor Kidd's philanthropic work does not end there. He has also served as the medical director for the Whitewater Volunteer Fire Department for more than 14 years; coached boys basketball and girls basketball and boys soccer; continues to serve as the medical director for the Badger State Games at UW-Whitewater; serves on the Community Team for Educational Excellence, a committee bringing businesses and schools together; is a regular guest speaker at schools where he talks about health care and the medical profession; and much more.

As Sandra L. Osborn, MD, SMS President, said in her Inaugural Address, "The list of opportunities to make our communities better is endless."

Dr. Kidd is an example of one who has made the most of those opportunities. He has taken the skills he has learned as a physician and applied them toward the enhancement of the community.

As Dr. Kidd explains, "Physicians need to be reminded that ours is a helping and serving profession. My role models are the volunteers on the rescue squad, guys like Roy Rockwell who for 25 years has been getting up for rescue calls for the sheer enjoyment of helping others."

The State Medical Society of Wisconsin, through the Physician Citizen of the Year Award program, encourages all physicians to give of themselves in whatever capacity they choose. Dr. Kidd is to be commended not only for what he has done, but what he has shown others they can do.

"There's no such thing as uncompensated volunteerism: the remuneration may be poor, but the compensation is great," said Dr. Kidd.

*The 1997 SMS Physician Citizen of the Year Award was awarded to eight individuals around the state. The *WMJ* will profile each of these award recipients in upcoming issues.

Gordon Tuffli, MD

Who's In The News

Dr. Tuffli Gives Back Through Mentoring Program

Few people have the opportunity to return to the institutions that gave them so much. That's just what pediatrician Gordon Tuffli, MD, MS, is doing as he assumes the role of JD Kabler mentor to the University of Wisconsin Medical School class of 2001.

Tuffli, himself a graduate of the UW Medical School class of 1964, will serve as the school's 11th Kabler mentor. He is the first appointed mentor with extensive private practice experience. Tuffli, a pediatric endocrinologist, will retire from his Physicians Plus practice at the end of the year.

Established in the fall of 1985, the JD Kabler Mentor Program recruits experienced senior physicians, who in essence become students themselves by attending classes, discussions, labs and clinical rotations alongside the new students. This way, the mentor can get a personalized view of what the students face and offer practical suggestions to both students and faculty.

JD Kabler, Mentor and Leader

JD Kabler, MD was the eighth senior faculty member to participate in the program, which ended when funds were reallocated in 1996.

Recognized by colleagues and laymen alike as a giant in medicine, Dr. Kabler was a medical leader and statesman who served as liaison between "town and gown" as President of both the State Medical Society of Wisconsin (1988-89) and the Dane County Medical Society (1978-79), as an alternate delegate to the AMA and as Chair of the SMS Committee on Medicine and Ethics and the Interprofessional Relations Committee with the State Bar Association. He also served on the SMS Foundation Board of Directors. He directed the Department of Medicine's Headache Clinic and developed an early interest in psychosomatic medicine. Dr. Kabler particularly enjoyed bedside teaching as he attended rounds with students.

> *"The JD Kabler Mentor Program will be a visible reminder of the impact JD had on the medical students on this campus, and provides a specific way to continue to improve upon medical education, to which he devoted his career."*
>
> —University of Wisconsin Medical School Dean, Philip M. Farrell, MD

Last year, UW Medical School Dean Philip M. Farrell, MD, committed to reinstating the mentor program, asked the University of Wisconsin Foundation to lead an effort to raise private support for the newly-named JD Kabler Mentor Program in honor of the late Professor of Medicine who served the Medical School for nearly four decades and who was Mentor for the Class of 1996. The UW Foundation, worked with JD's widow, Mrs. Bea Kabler, the SMS Foundation, which wanted to participate in fund-raising efforts because of Dr. Kabler's long-standing leadership in the SMS and the Foundation, and a steering committee comprised of faculty members and others who believe that the mentor is an invaluable asset to the medical school. The efforts have been successful, as evidenced by Dr. Tuffli's appointment.

What You can't Learn from Books

"Medical school is a stressful time. It's important for somebody with experience to help provide the students counsel to deal with the stresses," said Tuffli.

But the most important thing, he said, may be to teach them how to remain human in practice.

"When you're dealing with stressful situations because of the workload, it's easy to become defensive and dehumanized," said Tuffli.

The practice of medicine may rely on knowledge, but the art of being a physician encompasses much more, Tuffli added.

"We need to teach how to listen, hold and touch," he says. "These aren't naturally evident talents in most people — they often have to be taught and nurtured. It's important to learn how to cry with a family and yet remain emotionally objective. In other words, how do you stay human?"

Tuffli's appointment is largely honorary. He will receive a small stipend as mentor, but money is hardly his motivation for accepting the position.

"This is more my way of paying back to the medical school that which they gave to me," he says.

After a decade of experience, the consensus is that the mentor program has been worthwhile and it has improved medical student education at the UW. "The program's results are intangible—they can't be measured," claims Emeritus Professor of Pediatrics and former Associate Dean for Academic Affairs Charles Lobeck, MD, who was influential in initiating the program.

Committee members

Currently, the steering committee members for the JD Kabler Mentor Program are as follows: Charles Lobeck, MD, Professor Emeritus, Chair; Robert Schilling, MD, Professor Emeritus; Peter Eichman, MD, Professor Emeritus; Betty Bamforth, MD, Professor Emeritus; William Segar, MD, Professor Emeritus; Benton Taylor, MD, Professor Emeritus; Edward Ehrlich, MD, Professor Emeritus; Gordon Tuffli, MD; Pamela Wilson, MD, Associate Professor of Medicine; Mrs JD (Beatrice) Kabler; H. Bernard Maroney II, Attorney; Julie Hein, SMS Foundation.

If you are interested in obtaining more information about the program, please contact Patricia Franson, Director of Development, University of Wisconsin Medical School, (608) 262-3020, or Julie Hein with the SMS Foundation at (800) 362-9080.

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Who's In The News

John Beasley, MD

Theresa Behrs, MD

Robert Cates, MD

Michael C. Fiore, MD

Jon A. Arnason, MD, a rheumatologist, began seeing patients at the Adams County Memorial Hospital. Doctor Arnason is a graduate of the University of Iceland and received his medical degree at the University of Wisconsin-Madison. He has been practicing internal medicine and rheumatology at UW Health, Portage Community Clinic since 1995.

Mark Banas, DO, emergency medicine, joined the Rhinelander Medical Center. Doctor Banas received his medical degree from the Ohio University College of Osteopathic Medicine. He served his general internship at Firelands Community Hospital in Sandusky, Ohio, and completed his emergency medicine residency at Bi-County Community Hospital, Warren, MI.

John W. Beasley, MD, University of Wisconsin Medical School associate professor of family medicine, was recently honored by Governor Tommy Thompson with Wisconsin's Primary Health Care Educator Award for 1997. Doctor Beasley was cited by the Governor's Office for "innovation and persistence" in starting primary care education programs. He helped establish the third-year Family Practice clerkship at UW Medical School and played a key role in creating the Advanced Life Support in Obstetrics course which enables family physicians and other health care providers to improve their emergency maternity care skills. He is director of the Wisconsin Research Network (WreN), one of the nation's largest and most productive regional practice-based research networks. Doctor Beasley was commended for providing medical care to an underserved area with the establishment of the Tigerton Clinic in northern Wisconsin.

Theresa Behrs, MD, a dermatologist, joined the Dean Medical Center in Madison.

Sean Benham, MD, a general surgeon, joined Holy Family Memorial's Physician Division in Manitowoc. Doctor Benham earned his medical degree from St. George University School of Medicine and completed his residency at Providence Hospital in Michigan.

Michael Borkowski, MD, of Work Injury Care Center, Glendale, and **Robert Braco, MD**, an occupational medicine specialist with Beloit Memorial Hospital, have been qualified as certified medical review officers. The certification is awarded to physicians with the highest professional standards of medical expertise and practical skills necessary to evaluate drug and alcohol tests in public and private sectors of the workplace. Doctor Borkowski will deal with workplace drug and alcohol problems and chemical dependency. Doctor Braco is medical director for the hospital's Occupational Health and Sports Medicine Center and also certified as a forensic and an independent medical examiner.

Henry Bradley, MD, of Elm Grove has been named as a fellow of the American College of Radiology. Fellowships are awarded to members for significant scientific or clinical research in radiology or for significant contributions to literature.

JoAnne Budi, MD, a family physician, joined Artwich Clinic, Oconto Falls. Doctor Budi earned her medical degree from the University of Iowa College of Medicine, and completed her residency at the University of Iowa Hospitals and Clinics in Iowa City.

Robert Cates, MD, a family physician from the Monroe Clinic of Brodhead, recently received a Certificate of Added Qualifications in Sports Medicine. For the past four years, Dr. Cates has been a part of the Brodhead-Juda football team as the team physician. Doctor Cates earned his medical degree from the University of Wisconsin Medical School and completed his internship and residency at the Family Practice at Moses H. Cone Memorial Hospital in Greensboro, NC.

Michael C. Fiore, MD, director of the Center for Tobacco Research and Intervention at the University of Wisconsin Medical

Who's In The News

Cyril Hetsko, MD

Eileen Gavin, MD

Dennis Hudson, MD

Paul A. Luetmer, MD

School in Madison, won the 1997 Dan Anderson Research Award. The award, sponsored by the Hazelden Foundation's Butler Center for Research and Learning, recognizes the distinguished contribution of a researcher who has advanced the scientific knowledge of addiction recovery. Doctor Fiore is noted for research that supports reducing the great health burden produced by nicotine addiction. He has also chaired a panel that produced a national clinical practice guideline on smoking cessation.

Seth L. Foldy, MD, a family physician and medical director for the City of Milwaukee Health Department, received a Community Service Award at the 151st Annual Meeting of the Milwaukee County Medical Society.

Eileen Gavin, MD, a family physician, joined Physicians Plus-Beaver Dam clinic. Doctor Gavin received her medical degree from Rush Medical College in Chicago and completed her residency at the UW Family Practice in Wausau serving as chief resident for the family practice department.

Andrew Graf, MD, a urologist, recently joined the Physicians Plus-Columbus clinic. Doctor Graf received his medical degree from the University of Texas and completed his residency at the University of Minnesota.

Craig Paul Griebel, MD, a family physician, received the degree of Fellow of the American Academy of Family Physicians at their meeting held in Chicago. The degree recognizes family physicians who have distinguished themselves among their colleagues and in their communities through service to family medicine and professional development.

L. Fraser Guy, MD, a psychiatrist, joined Lakeshore Mental Health, Inc., which serves patients in Sheboygan, Plymouth, Fond du Lac, and Chilton. Doctor Guy earned his medical degree at the University of Virginia School and Medicine, and completed his psychiatric residency at the University of Rochester, NY. Also experienced in general medicine, he served as Medical Officer in the U.S. Navy from 1967-1969.

Kathleen Hargarten, MD, has been named medical director of the Watertown Memorial Hospital emergency department. Doctor Hargarten is also a part-time clinical assistant professor at the Medical College of Wisconsin and the UW Hospital and Clinics.

Kurt Hansen, MD, staff geriatrician at University Hospital, has been named medical director for ManorCare Health Services in Madison.

Cyril M. (Kim) Hetsko, MD, an internist in Madison, was elected secretary-treasurer of the American Society of Internal Medicine (ASIM) at the group's annual meeting held in Washington, DC. He is active in medical society affairs at the state and national levels. Doctor Hetsko was re-elected to a second term on the AMA's Council on Medical Service; chairs both the Wisconsin delegation to the AMA House of Delegates and the ASIM Political Action Committee, and is a member of the board of directors of the Commission on Office Laboratory Accreditation. He is past-president of the North Central Medical Conference, the State Medical Society of Wisconsin and the Wisconsin Society of Internal Medicine. He received his medical degree from the University of Rochester, and completed his residency and internship at the University of Wisconsin Hospitals. Dr. Hetsko served in the U.S. Army as a research internist at the U.S. Army Medical Research Institute of Infectious Diseases and the Walter Reed Army Medical Center.

Dennis M. Hudson, MD, an internist, recently joined the staff of Rehabilitation Physicians of Northeast Wisconsin. Dr. Hudson earned his medical degree from the University of New Mexico. He completed his internship in internal medicine at Good Samaritan Regional Medical Center and residency in physical medicine and rehabilita-

Who's In The News

Patricia McDougall, MD

Rodolfo Molina, MD

Theresa Ann Oswald, MD

Gaines Richardson, MD

tion at the Medical College of Wisconsin.

Wahab A. Kazi, MD, a family physician, received the degree of Fellow of the American Academy of Family Physicians at their recent meeting in Chicago.

Stephen Kmecak, MD, a general and vascular surgeon, joined the staff at Memorial Hospital of Burlington, an affiliate of Aurora Health Care. Doctor Kmecak earned his medical degree at the University of Louisville School of Medicine in Kentucky and completed his residency in surgery at the Medical College of Wisconsin.

Paul A. Luetmer, MD, cardiologist, joined the staff at Memorial Hospital in Medford. Doctor Luetmer earned his medical degree from the University of Minnesota School of Medicine in Minneapolis. He completed his internship and residency in internal medicine at Dartmouth-Hitchcock Medical Center in Hanover, NH. A fellowship in cardiology was completed through the University of Vermont in Burlington, VT.

Dennis Luther, MD, an internist, recently joined Group Health Cooperative's Riverview Clinic, Eau Claire. Doctor Luther received his medical degree from the University of Pittsburgh School of Medicine, and completed his residency at the University of Nevada-Reno.

Peter Martens, MD, an internist, has joined Aurora Medical Group Oshkosh. Doctor Martens earned his medical education at the University of Wisconsin Medical School, and completed his internal medicine residency at Miriam Hospital in Providence, RI.

Patricia McDougall, MD, an orthopedic surgeon, has joined Prevea Clinic in Green Bay. Doctor McDougall received her medical degree from the University of Cincinnati College of Medicine and completed her residency at Northwestern University Medical School.

Rodolfo Molina, MD, chief of the medical staff at Divine Savior Hospital, was honored as one of the 1997-98 "Twenty Outstanding Filipino Americans in the U.S. and Canada." Doctor Molina was chosen for the award for providing "a positive image for Filipino Americans, representing achievement in personal and community endeavors and providing unselfish support of those in need." He has assisted the needy in the Philippines with medical supplies, financial aid, hospital equipment and medical assistance as a charter member and past chairman of the Dr. Jose P. Rizal - General MacArthur Foundation. Doctor Molina was appointed to the State Medical Examining Board in 1989 where he currently serves as chair. He is board certified in both anatomical and clinical pathology and in nuclear medicine.

Doug Nelson, MD, an allergist, joined the medical staff at the Franciscan Skemp Lake Tomah Clinic. Doctor Nelson received his medical degree from the University of Minnesota and completed his residency and fellowship at the Mayo Graduate School of Medicine in Rochester, MN.

Paul Nelsen, MD, a family practitioner, joined Family Health Care Clinic in Ripon.

Theresa Ann Oswald, MD, an internist, joined Rehabilitation Physicians of Northeast Wisconsin in Green Bay. Doctor Oswald earned her medical degree from the Medical College of Wisconsin. She completed her residency in physician medicine and rehabilitation at Northwestern University Medical School, Chicago and her internship at the Medical College of Wisconsin Affiliated Hospitals.

Jon Radcliffe, DO, a family practitioner, recently joined the staff at the Scenic Bluffs Community Health Center in Cashton. He attended medical school in Ohio and completed his family practice residency at Mercy Health System in Janesville. Doctor Radcliffe is also on staff at Vernon Memorial Hospital in Viroqua.

Gaines Richardson, MD, a family practitioner, recently joined the Monroe Clinic.

Who's In The News

Brock Robinson, MD

Rose Turba, MD

Donald Wackwitz, MD

Doctor Richardson completed his residency with the Trover Clinic Foundation in Madisonville, KY and received his medical degree from Louisiana State University Medical Center, New Orleans, LA.

John E. Ridley, III, MD, an ophthalmologist, has joined the staff of the Milwaukee Medical Clinic. Doctor Ridley, an SMS AMA Alternate Delegate, also teaches at the Medical College of Wisconsin.

Brock L. Robinson, MD, joined the Rehabilitation Physicians of Northeast Wisconsin - Prevea Clinic in Green Bay. Doctor Robinson earned his medical degree at the University of Minnesota. His internship was completed at St. Paul Ramsey Medical Center, St. Paul, MN and residency at the University of Minnesota, Department of Physical Medicine and Rehabilitation.

David Rushlow, MD, recently joined the La Crosse-Mayo Family Practice Residency as a faculty physician. Doctor Rushlow will supervise the training of resident physicians in the specialty of family practice.

Clyde E. Siefert, MD, a family physician and surgeon, recently joined the Bellin Medical Group. Doctor Siefert is on the board of directors at Community Memorial Hospital in Oconto Falls and is the medical director at the Gillett Nursing Home. He earned his medical degree from the University of Cincinnati College of Medicine and completed his internship at St. Mary's Hospital, Cincinnati. He is a member of the Oconto County Medical Society and a lifetime member of the American Academy of Family Physicians. Doctor Siefert was presented with the Family Physician of the Year award in 1992 by the Wisconsin Academy of Family Physicians.

Rose M. Turba, MD, joined the Rehabilitation Physicians of Northeast Wisconsin, Green Bay. Doctor Turba completed her residency in physical medicine and rehabilitation at Northwestern University Medical School-Rehabilitation Institute of Chicago and internship in internal medicine at Northwestern University Medical School-Northwestern Memorial Hospital. She is currently the medical director at St. Vincent Hospital Rehabilitation Services in Green Bay.

Daniel Tvedten, MD, an orthopedic surgeon, has joined Northland Orthopedic Associates, Rhinelander. Doctor Tvedten earned his medical degree from the University of Minnesota Medical School. After completing a surgical internship at Oakland Naval Hospital, he did one year of medical work in Okinawa before completing an orthopedic surgical residency at Oakland Naval Hospital.

Eleanor O. Vita, MD, a family physician, has joined the Dells Clinic, Wisconsin Dells. Doctor Vita earned her medical degree at the University of Southern California at Los Angeles, and served her internship and residency at Kaiser Permanente in California.

Donald L. Wackwitz, MD, of the Prevea Sports Medicine Clinic in Ashwaubenon, was elected to Active Member status in The American Orthopaedic Society for Sports Medicine. He was instrumental in the formation of outreach programs placing certified athletic trainers in the area high schools. Doctor Wackwitz is the team physician for St. Norbert College athletics, and continues to provide volunteer physician coverage for many high school and community athletic events.

Joseph Welter, MD, an obstetrician/gynecologist, joined the Marshfield Clinic. He earned his medical degree from the Medical College of Wisconsin and served his residency at the University of Wisconsin Hospital and Clinics in Madison.

Jeffrey R. Zigun, MD, psychiatrist and neuropsychiatrist, joined the staff of Phoenix Clinic, Wauwatosa. Doctor Zigun is clinical assistant professor of psychiatry and neurology at the Medical College of Wisconsin and Clinical Assistant Professor of psychiatry at the University of Wisconsin Medical School.

Welcome New Members

The individuals listed below were recently elected to SMS membership by their county medical societies. We are pleased to welcome them to the SMS.

Dane
Joann C. Ellero, MD
Robert G. Huber, MD
Barbara L. Knisley, MD
Louise F. Laterell, MD
Thomas S. McDowell, MD
Julie K. Nielsen, MD
Paul B. Renner, MD
Meriel S. Rongstad, MD
Louis A. Sanner, MD
Peggy S. Scallon, MD

Dodge
Eileen S. Gavin, MD
Alexandra McMurray, MD

Door-Kewaunee
John M. Kirsch, MD

Eau Claire-Dunn-Pepin
Steven Baker, MD
Louis Benoist, MD
Ralph Cho, MD

Fond du Lac
Kathryn W. Brimhall, MD
Christopher Johnson, MD
Anthony K. Strigenz, MD

Marathon
Jonathan David Screnock, MD

Ozaukee
Mohammad E. Rassouli, MD
Theresa A. Siegert, MD

Pierce-St. Croix
Sandra Beulke, MD

Portage
Mark S. Wadina, MD

Racine
John M. Skantz, MD

Richland
Naveen Manchanda, MD

Trempealeau-Jackson-Buffalo
Daniel R. Lenselink, MD
Carol A. Martin, MD
Charles H. Miller, III, MD
Ellwood G. Voorhees, MD

Waukesha
Maurice D. Brown, MD
James A. Censky, MD
James H. Davis, DO
Sandra Groenewold, MD
Timothy S. Hart, MD
Terrence P. Hughes, DO
Dan D. Kanitz, MD
George J. Korkos, MD
Stephen Lazoritz, MD
Ronald K. Meyer, MD
Glenn A. Raymond, MD
Federico A. Sanchez, MD
Margaret Sandura Engdahl, MD
Kimberly A. Shoenbill, MD
Mohammad Tinawi, MD
Ann Tousignant, MD
Catherine E. Way, MD
Lori L. Wisnefski, MD

In Remembrance

Crowley, William Patrick, Jr., MD, 70, an internist from Madison, died November 5, 1997. Doctor Crowley earned his medical degree at the University of Wisconsin Medical School. He completed his internship at the Graduate Hospital of University of Pennsylvania in Philadelphia and residency at the Mayo Foundation in Rochester. After his retirement in 1994, he continued working part-time at the William S. Middleton Veterans Administration Hospital.

His professional memberships and appointments included: Chairman, Department of Medicine at St. Marys Hospital; Secretary of Staff, Madison General Hospital; member of the Dane County Medical Society, the State Medical Society and the American Medical Association. Doctor Crowley served on the SMS Board of Directors from 1976 to 1985. He was a member of the SMS Committee on Economic Medicine and was SMS Treasurer in 1992. Doctor Crowley also served on the Board of Directors for SMS Services, Inc., and was president of that corporation from 1980 to 1989. Doctor Crowley is survived by his wife Patricia; two children, Dan and Mary Pat Hank; and five grandchildren.

Petersik, John T., MD, 82, a psychiatrist from Oshkosh, died October 11, 1997. Doctor Petersik earned his medical degree from the Marquette University School of Medicine and completed his internship at Milwaukee County General Hospital. Doctor Petersik served as superintendent of Winnebago State Hospital; medical director of the Alexian Brothers home in Oshkosh; was a staff member of Mercy Hospital and Mercy Medical Center; and a consulting psychiatrist at Ripon College. He taught at Winnebago Mental Health Institute following his retirement.

Doctor Petersik was a member of the American Medical Association and Winnebago County Medical Society, of which he was a past president. He was a Lifetime Fellow of the American Psychiatric Association, the Wisconsin Psychiatric Association and member of the SMS 50 Year Club. He also served as an advisor to several state and local legislative councils throughout his career. Doctor Petersik is survived by his wife Lucille; three children, Thomas, of St. Charles, IL; Timothy, of Ripon; Mary Herder, of Lawton, MI; eleven grandchildren; and one great grandson.

Nominations Sought for Editorial Board; Papers Needed for 1998

by Thomas C. Meyer, MD, Medical Editor/Chair, WMJ Editorial Board

The *WMJ* Editorial Board currently consists of nine members, but at our fall, 1997 meeting, we decided that it's time to recruit a few more members to the Board. We see our role as encouraging new authors to publish. Consequently, we tend to work with authors quite closely over a period of months (through the Medical Editor), offering suggestions for revisions and coaching the authors, in order to develop the papers and ensure the highest degree of quality.

Each Board member receives a copy of each manuscript upon submission and each "attacks" it with more or less vigor depending on time constraints and general reaction to the topic and the writing. As Medical Editor and Chair, I collect the comments from the Board members and work with the authors. We typically review between four and six manuscripts each month.

The only other "duty" is an afternoon meeting once a year where we review what's going on, complain a lot and brainstorm new ideas and/or "themes" for future issues. It is very low-key and sort of fun.

Appointments to the Editorial Board are made by the SMS Board of Directors and the term is three years.

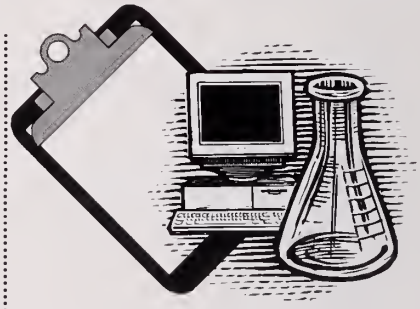
Qualities We're Seeking in an Editorial Board Member

- a keen interest in all kinds of research
- an open mind and ability to offer constructive criticism
- a supportive attitude
- excellent command of the English language
- the ability to carefully dissect an article
- the ability to find flaws in the logic presented
- the ability to identify information which should be included in the paper but is missing
- previous experience publishing in scientific journals and performing research is helpful.

What You Get

- one free lunch per year!
- regular intellectual stimulation

Please consider joining us for a very important leadership role with your State Medical Society and the *WMJ*. For more information or to make a nomination, please contact Judith D. Burke, Director, Communications at SMS ext. 350 or via e-mail at: JUDITHB@smswi.org, or Tom Meyer at: 263-2852 or e-mail to: tcmeyer@facstaff.wisc.edu.



Call for Papers, Reviews, Commentary. . .

The Editorial Board is seeking original articles for 1998 publication on topics related to:

- addictive diseases
- eating disorders/nutrition/obesity
- arthritis
- osteoporosis
- sleep medicine
- risk management and liability
- organ donation
- emerging technologies
- the "aging" boomer
- emergency medical services/first responder
- chronic diseases/chronic pain
- medical education

Papers may be original research, literature or book reviews, case histories/reports accompanied by a brief overview of the relevant literature, well documented opinions about future trends, or your thoughts on a particular topic in the form of a guest editorial.

All submissions should conform to Wisconsin Medical Journal requirements. Please see Instructions to Authors on page 69.

Thomas Meyer, MD, is with the Office of Continuing Medical Education at the University of Wisconsin and Emeritus Professor of Pediatrics; he is former Vice-President for Medical Affairs at St. Marys Hospital Center (1986-95). Dr. Meyer has been the Chair of the *WMJ* Editorial Board since 1995.

Guest Editorial

Long-Term Care Reform is a Major Piece of Unfinished Business

by Russell D. Feingold, U.S. Senator

When the 105th Congress reconvenes in late January, one issue that should be given high priority is long-term health care reform.

This has been one of my priorities ever since I entered public service; I believe reform will make our health care system more efficient and cost-effective while providing consumers with more choices.

I recently co-authored, with my colleague, Senator Charles Grassley (R-IA), who chairs the Senate Special Committee on Aging, on which I also serve, a proposal calling on the National Bipartisan Commission on the Future of Medicare to examine the potential for coordinating Medicare with cost-effective long-term care services. This Commission is studying ways to reform and modernize the principal health care system for our nation's senior citizens.

One key area the Commission is expected to examine is chronic disease and disabilities. This is a major area of concern because an estimated 20% of Medicare beneficiaries have chronic health care needs, and they are the fastest-growing segment of the Medicare population. Treating the chronically ill requires a combination of acute and preventive care, disease management, health monitoring and long-term care services and supports.

But as Medicare's fee-for-service program is currently structured, it responds to specific and discrete episodes of care through separate providers, and it often discourages timely, coordinated and cost-effective chronic care. A major part of the health care provided to Medicare beneficiaries with chronic conditions is the long-term care services and supports that are separately financed by beneficiaries and their families, or, for those without personal resources, by Medicaid and the states.

People who need chronic care and are eligible for both Medicare and Medicaid help make up a particularly important group of beneficiaries. This "dually-eligible" population represents about one-sixth of Medicare and Medicaid beneficiaries, but it absorbs about one-third of program expenditures. The Aging Committee learned that the lack of coordination between these two programs, and more generally between Medicare and long-term care, creates some perverse incentives for cost-shifting in the health-care system and often results in excess cost, inappropriate care or even no care at all.

The Commission should examine a variety of approaches, including the success of some state-based long-term care programs in developing more flexible, cost-effective and individualized health care delivery systems and the potential for coordinating and integrating Medicare with publicly and privately financed long-term care services in ways that build upon the existing network of so-called "informal care," which currently provides the vast majority of long-term care in this country.

Whatever avenue the Commission pursues, the bottom line is the need to know the total costs of care for individuals with chronic illnesses and disabilities, including the costs of long-term care services and supports, whether those costs accrue from Medicare, Medicaid, private insurers, or the beneficiaries and their families.

Fully understanding all these costs will help the Commission make recommendations for modernization and reform based upon a long and broad view of the chal-lenges presented by Medicare and Medicaid and our need to provide care to a growing population. This way, we can avoid some of the past errors that have resulted from decisions based on short-term budget considerations, which in turn have led to unintended — and sometimes expensive — consequences.

Long-term care reform will require an enormous amount of thought, research and analysis. Lawmakers will be grappling with the mounting fiscal pressures being exerted on the federal budget by health care as demands for services increase. The need is acute, and reform must not wait.

To contact Senator Feingold, please write to him at: 716 Hart Building, Washington, D.C., 20510, or contact his office by phone (202) 224-5323; by fax at: (202) 224-2725; or visit his World Wide Web page at: http://www.senate.gov/~feingold.

Russell D. Feingold was elected U.S. Senator from Wisconsin in 1992. He currently serves on the Senate Special Committee on Aging, the Judiciary Committee, Budget Committee, and the Foreign Relations Committee.

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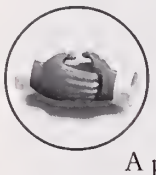
Guest Editorial

Rehabilitation: At the Core of Medicine

by Joseph Blustein, MD

Rehabilitation is one of the three basic tenets of medicine. Prevention and curative therapy or surgery are the other two. Rehabilitation is by far the most socially related function, where the doctor-patient relationship is paramount in restoring good health. As Rudolf Virchow, the cellular pathologist, stated, "Medicine is a social science in its very marrow."

Rehabilitation exemplifies this to its fullest.



Returning each patient to a condition of individualized, optimal well-being is the goal of every physician.

A patient is more than just a chance isolation of an illness or injury. In order for the patient-doctor relationship to work effectively, the physician needs to recognize each patient as a complex social being, living in a network of relations with varying cultural and personal outlooks.

Uncovering the functional implications for a disease requires an attentive physician listener, allowing the patient or caregiver to speak freely and only asking questions for clarification. Rehabilitation is a philosophy, a mindset, seeking to answer how this disease or injury affects a person's life — what one can no longer do and how that precludes what is meaningful at home and work. After gaining this knowledge, an individualized program is designed and implemented for achieving one's goals.

> *"Rehabilitation is one of the three basic tenets of medicine. . . it is by far the most socially related function, where the doctor-patient relationship is paramount in restoring good health."*

Howard Rusk, the father of psychiatry, stressed the importance of an active rehabilitation program over passive convalescence. Our medical system thrives on short-term care and dramatic cures. The sophisticated surgical interventions and drug regimens are of limited usefulness in treating the disabled. As we approach the next century, it is clear that the ascendancy of chronic diseases and disabilities will be a major problem facing medicine. Rehabilitation must be an integral part of comprehensive medical care and its application to restore those with continuing impairments to optimal levels of performance in their homes and communities. Rehabilitation will increase the efficiency of our health care system as measured by cost-benefit analyses and, more importantly, by quality of life indices.

The overall goal for our society is the optimal functional performance of every person in the home and community throughout life. By accepting the concept of rehabilitation in our everyday practices we can meet these challenges and look forward to a brighter future.

Joseph Blustein, MD, is a *WMJ* Editorial Board member and Medical Director with MetaStar, in Madison.

Rehabilitation Medicine Offers the Best of Old and New

By Marc Kennedy, Special to WMJ

While the basics of rehabilitation medicine remain the same — physical therapy, assistive and prosthetic equipment, pain management — advances in methods to deliver these components of care have dramatically improved in the last decade.

"Rehabilitation is such a broad field, covering everything from mental function to motor function," says John Merritt, MD FACP, Chair of the Medical College of Wisconsin Department of Physical Medicine and Rehabilitation in Milwaukee. "At our Curative Rehabilitation Center, we run the gamut, focusing on practical programs to increase patient function, from bladder control to pain management."

While traditional physical therapy is part of any modern rehabilitation clinic, he adds that new technology is having tremendous effects in patient outcomes, particularly for spinal cord injuries and stroke patients. The equipment today — braces, wheel chairs, prosthetics — are lighter, more functional. And, contemporary assistive devices enable patients to move and function while expending much less energy, says Merritt. A prime example is the "prone cart," which allow patients with severe motor dysfunction to mobilize.

"This simple, but well-designed technology allows patients to get out of their rooms, to move about in public, to be more independent."

Another advance is FES — functional electrical stimulation — to activate paralyzed limbs. "You could describe it as computerized walking, tied in with cables and run by an electrical system," says Merritt. "With FES, we can train a person to walk, and can help them grasp and release using a paralyzed hand. We're getting better at building functionality into equipment and make technology friendly so that people can adapt and use it."

New Technology to Manage Complications

A major complication that accompanies post-trauma or stroke patients is spasticity. Overactive reflexes occur after brain trauma due to stroke or spinal injuries which cause feet or hands to continually cramp. "This condition has long been a barrier to effective rehabilitation," says Merritt. "Cramping can make patients terribly uncomfortable, and can make them immobile, leading to pressure sores. And, if you can't get the patient's hand or foot relaxed, it is difficult to move on to more extensive rehabilitation."

John Merritt, MD, FACP, Chair, Department of Physical Medicine and Rehabilitation, Medical College of Wisconsin, talks about new advances in rehabilitation.

To address this problem, the clinic started the "Spasticity and Motor Recovery Program" which combines traditional clinical treatment — braces, medicine and physical therapy — with new advances, tailoring the regimen to individual patient needs.

One of the most promising new developments in managing complications for those who have suffered a stroke or spinal trauma is the compound "botox."

"Botox uses the botulism toxin, a powerful neurotoxin," says Merritt. "By using it in small amounts, it can be injected directly into spastic muscles, where the nerve attaches to the muscle, blocking the signal. It controls the spasm, but not totally like a nerve block. To monitor the level of botox required, we use an EMG or electrical stimulator attached to a needle, coated with Teflon, which is placed in each muscle to selectively address the amount of botox needed.

"For example," says Merritt, "consider a stroke victim with a cramped hand. We can selectively block the wrist and arm flexors. This can help the patient recover some of the motor function that was masked by continuous cramping allowing the patients then to go through normal rehabilitation. This technology has been coming into more common use in the last two to three years."

Another recent innovation is the "baclofen pump." Baclofen is a muscle relaxant and antispasmodic that inhibits the nervous system. Taken orally, it may be the best treatment for some patients, but there are side effects; most notably, drowsiness, confusion, dizziness and difficulties with gait and balance.

"To reduce the side effects and still deliver the drug, it is possible to insert a hockey-puck sized pump into a patient's abdomen, then run a tube into the spinal canal," Merritt explains. "The pump is programmed to deliver a much smaller dose directly into the spinal fluid, which can dramatically reduce spasticity. By using an electro-frequency induction coil, the pump can be programmed to deliver certain units at certain times. You can deliver individually-designed doses to patients, at one-thousandth the strength possible orally, and greatly diminish many of the negative side effects."

Baclofen is not yet accessible for stroke patients, Merritt adds, though trials are under way. "However, botox is available now, and is usually covered by insurance."

For an example of advances in assistive devices Merritt proudly points to the "prone cart" developed by clinic staff with the Veterans Administration and refined with help from a National Institute on Disability and Rehabilitation Research grant in collaboration with the Milwaukee Institute of Engineering and Design. "It allows patients to venture into the natural world. We have already tested it successfully in a shopping mall."

These new therapies aren't for everyone, but they form the vanguard of treatments available in addition to the traditional regimen of therapy:

- positioning
- splinting
- pharmaceuticals
- phenol blocks

Continuity of Care

An academic rehabilitation center such as the one in Milwaukee can bring together expertise and expensive technology to address the acute needs of trauma and stroke patients not available at the level of local community health care providers.

"I think we have an ideal situation here," says Irma G. Fiedler, Ph.D., Associate Chair in the Department of Physical Medicine and Rehabilitation. "Our teams of physiatrists see patients from the time they enter until they leave: from the helicopter, to acute care to rehabilitation. In other standard facilities, a patient would see emergency people first, then a series of physicians, and other health care providers. Here, the same team sees the same patient throughout. It enhances continuity of care and reduces redundant activity; the team is always up to speed with the progress of an individual patient and is attuned to his or her needs and progress.

"As well as therapy and rehabilitation, we offer peer counseling. Soon after a patient is confronted with prospects of permanent or long-term disability, a survivor comes in and explains how it's possible to continue to live a full life, to try to avoid a cycle of despair. We also try to get patients back to a normal routine as soon as possible. We want to get them back into their own community, set up with appropriate assisted care and rehabilitation and other medical care from their own local physician. We take pride in the fact that most of the physiatrists practicing in the state were trained here."

> *"Soon after a patient is confronted with prospects of permanent or long-term disability, a survivor comes in and explains how it's possible to continue to live a full life, to try to avoid a cycle of despair."*
> *Irma G. Fiedler, Ph.D.*

Merritt and Fiedler say that the latest advances are becoming more available to regional medical centers, but some barriers remain.

"Botox is quite expensive; not every clinic is going to be able to use it nor will their staff be trained to use it," says Fiedler. "It has to be used selectively."

She maintains that expense should not be the driving factor when considering delivering care to rehabilitation patients.

"On face value it is expensive, but you have to look at the big picture. The initial cost of this therapy is offset by savings from less hospitalization, fewer complications, and additional care that would no longer be required. Plus, the patient then can obtain more intensive therapy, which can improve his or her condition; not to mention the improved state of mind of patients who, with more full used of extremities, can be so much more comfortable and can continue to be productive in society."

Another example of prescribing technology that is expensive up-front is a sensor pad. "When some spinal cord or stroke patients require a wheel chair, they can suffer co-morbidity from pressure sores," Fiedler explains. "A sensor pad provides feedback; it beeps when the patient has been in one position too long. It's a good idea and it works, but some HMOs and insurance companies balk at the cost — $8,000 - $9,000. They often take some convincing. They want to see an immediate return, so they tend to deny requests for these technologies on the first pass. It takes persistence by professionals on behalf of patients. Most patients on their own are not likely to be able to continue to battle to cover the cost of appropriate therapy. They don't have the experience or the pull that we do."

Fiedler says that the same can be said for patients once they are discharged from the rehabilitation center. "We find that patients may be getting the medical attention they need. But once they leave the facility, even with follow up care and living assistance, are they getting the socio-psychological help they need to cope, survive and prosper?"

Rehabilitation Doesn't End Once the Patient's Out the Door

To many rehabilitation health care professionals, it is just as important to address what happens after therapy as it is to develop and deliver new advances in treatment and assistive devices to patients in need.

"We need to be diligent in continuity of care so we don't lose patients after we treat them for their initial injuries," says Irma G. Fiedler, Ph.D., Associate Chair in the Department of Physical Medicine and Rehabilitation at the Medical college of Wisconsin in Milwaukee. "Who is looking after them? Are they getting sufficient follow-up care? Are they able to work without losing benefits? What new technologies offer hope for patients? Usually no one has the time or money to investigate these and other important aspects concerning debilitating injuries brought on usually by head and spinal trauma or stroke. Thanks to a grant from NIDRR (the National Institute on Disability and Rehabilitation Research), we are."

With the NIDRR grant, the clinic has become one of 18 "Model Spinal Cord Injury Centers" in the nation, and the only one in the state. The grant has also enabled the clinic staff to embark on a wide range of studies and projects, including:

- Creating durable medical equipment, such as the "prone cart" (see accompanying article).
- Examining issues in the workplace. "Of 100 patients, 45 said they would work if they could. Unfortunately, many would lose benefits if they worked. This is an issue we must address, and the grant is allowing us to do so," says Fiedler. This includes looking at issues such as transportation. "If adequate and timely transportation is not available, a patient cannot routinely make it to work on time. An employer will regard this as a lack of enthusiasm or dedication, creating another barrier toward working and limiting a lifestyle promoting productivity and a sense of value.
- Joining a national project to assess statistics on spinal cord injuries. For example, car accidents are the primary cause in Wisconsin, with violent action, usually gunshots, second. "In most areas, primarily big cities, gunshots are number one," says Merritt.
- Visiting Milwaukee public schools and discussing with sixth graders the nature of spinal cord injuries, and the role that guns play in that risk.
- Documenting the extent of "hidden" assistance spinal injury and stroke patients are getting from friends and family. "This type of unpaid attendant care is not normally tabulated," says Fiedler, and likely represents a significant amount of important support which can help us determine the extent of assisted care such patients actually require.
- Addressing the sexuality of women with these types of injuries. "From what we can tell, this issue is usually ignored," says Fiedler. "Perhaps because 90% of the traumatic injury victims are male. But in cases of traumatic injury, it is about 50-50."

"The grant has given us the luxury of looking at essential issues of improving patient care that few had the time or funding to examine before," Fiedler explains. Exploring these usually neglected but important aspects will help rehabilitation professionals create benchmarks for care which in turn can help them design better treatment plans, and lay the groundwork for outlining the need for a sufficient level of long-term care. The latter can be used to convince HMOs and insurance companies of the value of care often considered secondary or superfluous.

"Just referring patients for a couple of sessions of physical therapy is hardly enough," says Fiedler. "In the atmosphere today of managed care, the likelihood that PT gets limited is possible. New gadgets are fine, we need them of course. But follow-up rehabilitation provided by professionals is still important. We need to remember that rehabilitation is hard work for patients; it takes dedication and persistence."

But the advent of managed care has changed this to an extent. "Often, we can't give patients the ideal, so we give them the pragmatic. You know, 'nice versus necessary.' "

Regulations Must Change

To Fiedler, one issue is of primary importance: regulations that prevent people who are disabled from working.

"How do you get disabled people to work if it will mean that they lose benefits and attendant care?" she asks. "It is important to many people with debilitating injuries to try to obtain a semblance of a normal life, and part of that is working. But sometimes they can't work because they will lose Social Security or other benefits. The regulations become counterproductive. So much of the after-injury care involves the psychological as well as physical follow-up care. Denying them the right to work, or making it more difficult is self-defeating. This must change."

Fiedler offers one solution. "Wisconsin leads the way in W-2 reform, 'work for welfare.' Why can't Wisconsin lead the way in allowing disabled people to work? It makes sense: it creates productive citizens and is actually more cost effective."

Why not indeed?

Focus on Rehabilitation

Rapids Clinic Provides New Twists to Sports Medicine

By Marc Kennedy, Special to WMJ

It's a typical, cool autumn Friday night in Wisconsin Rapids. Under the glare of the lights, in front of a roaring crowd, the highly-regarded Lincoln High football team dismantles its opponent on the gridiron. Pacing the sidelines among the coaches, managers and players is an athletic trainer, a volunteer who work with services free of charge. The trainer is one of six who works with Lincoln High and other area schools as part of a program established by John McDonough, MD, founder of the McDonough Orthopaedic and Sports Medicine Center in Wisconsin Rapids.

"It's a great system," says Wayne Christie, MD, orthopedic specialist at the clinic. "Staffing eight to ten schools in the area as athletic trainers gives us the opportunity to get to know the kids in the surrounding area.

"Everyone likes it: the athletes, the coaches, the parents, the trainers. The parents like having that level of security of having the trainers at athletic events. We get involved, too. You'll usually find Dr. McDonough or myself along the sidelines, too," says Christie.

Christie says that they don't claim to have invented the idea of staffing neighboring schools with athletic trainers. "I believe the hospital in Marshfield is beginning such a program, and I believe the UW Medical School in Madison has had a program for some time, but I believe that is by contract with the schools. Being in a small town, ours is easier to manage, so our service is free."

John W. McDonough, MD

McDonough initiated the program four years ago, about the time that Christie relocated to Wisconsin Rapids. The innovative volunteer trainer program, says Christie, is indicative of McDonough's interest in providing contemporary solutions to the needs of area residents concerning orthopedics and rehabilitation medicine.

Exercising the Options

"Several years ago, Dr. McDonough decided that so many patients wanted to continue to expand their rehabilitation exercises, to keep working out, so he added a gym to the practice," says Christie. "Patients had gotten used to receiving quality, informed care and advice from our staff. They wanted to keep working out, but wanted to continue to rely on assistance from professionals concerning appropriate workouts for their particular athletic needs. Now we have a full gym, and a pool."

This arrangement has worked well for the clinic's growing number of elderly patients. "They are in here first thing in the morning, riding the bikes, swimming in the pool. Patients come in for rehab and therapy after knee or shoulder problems, then get hooked on exercise. It becomes a way of life."

Combining the clinic with a gym dovetails with the growing emphasis on exercise and sports, says Christie. "People are finding that they can be active at any age, 15 or 75. They don't have to be world class athletes, but they can be more active individuals. And, when you come to our gym, you get help from dedicated professionals under a properly supervised regimen. We are getting older ladies with osteoporosis, lifting weights, working out, which can help slow the onset. They are finding out that you don't have to be Jane Fonda to feel good."

Wayne R. Christie, MD

This arrangement has had an unexpected benefit. "With the managed care system today, one of the first things that gets restricted is physical therapy. If we still think a patient should continue and insurance won't pay for it, they can continue therapy for a five-dollar visit to the gym. It's not breaking the patient's pocketbook, and they are still getting proper care."

Modern Technology Boundless

Being in the "boonies" doesn't mean that patients are receiving anything but the best care, adds Christie, who is board certified in orthopedic surgery and a member of Arthroscopic Society of North America. He recently was selected as an instructor to teach

arthroscopic technique to other professionals. "Perhaps we can't run down to the grand rounds at UCLA, but with the miracle of modern communications, we keep up. And, if we need to meet with colleagues or attend meetings, Rapids does have an airport."

Christie says the clinic offers modern orthopedic technology, and applies it to fit the needs of the local population. "We try to do things in the least invasive way as possible. Whether it's a farmer who hurt his shoulder baling hay, or a factory worker on the assembly line, or an elderly patient with joint problems. We do our best not to open the joint if we don't have to."

They use the latest technology, for example, using a "microfracture technique" to arthroscopically stimulate cartilage growth in knees. "You drill small, well-calibrated holes on the bone where you lost cartilage. Blood cells stick to the area denuded of cartilage, and eventually heals, with fibril cartilage, also called scar cartilage, filling in these holes."

Christie adds that they are also performing OATS: Osteocondral Autograph Transplant surgery. "It's similar to hair plugs, taking articular cartilage from where you have it to where don't. For meniscal cartilage, we try to repair and save the structure as often as we can. We try to catch problems before they get worse. We try to keep parts working, so we don't take them out if we can avoid it, hoping to be able to save joint. In the '70s and '80s, it was total joint repair. In the '90s, we will be keeping and repairing articular and meniscal cartilage."

In addition to this less invasive approach, Christie added that they take on rehabilitation aggressively.

"After an anterior cruciate ligament repair, we try to get folks out of the hospital the same day," he says. "We believe in aggressive post-op rehab: five to seven days later we get them going — range of motion, full rehab capabilities."

The clinic-gym connection helps Christie and McDonough provide options for patients and the community. "We run a program for community athletes. For the football team, we bring them in, and put them through a six- to eight-week course during the summer. Then they show up for their two -a-day practices ready to go. We have substantially decreased pre-season injuries through this program — the sprains, the muscle pulls, etc. The kids come in strong, flexible, and in shape."

Is there evidence of the effectiveness of the clinic's program? The Rapids football team made it to the semi-finals in the state playoffs, and came within a handful of points of playing in the championship game.

One Patient's Long Road to Rehabilitation

by Steve Busalacchi, Contributing Editor

It's been two years since Jackie Millar was shot in the head during a robbery attempt. Just by surviving, she beat the odds. But the Madison, Wisconsin resident's can-do attitude has helped her make remarkable progress for someone who still has a bullet lodged in the back of her head. She can walk, talk and see, although her eyesight is clouded.

"I like hard work," Millar stated confidently. "I'm not afraid of it." Her mind remains sharp and her speech is clear, but it takes a few seconds for her to find the right words. And when they come, she speaks haltingly.

"Talk to people? Heck, that's like us going to work," said Keith B. Sperling, MD, professor of physical and rehabilitative medicine at Madison's University of Wisconsin Hospital and Clinics. Talking is a "monumental feat" for somebody who's suffered a brain injury like Millar's, according to Sperling. He was among the physicians who cared for the 46 year old mother of two, following the November 4, 1995, handgun attack by two teenagers.

The Virginia-based Brain Injury Association, Inc., estimates that traumatic brain injury or TBI, strikes 373,000 Americans each year. These thousands of head injuries result from external physical force — not from medical conditions. For example, vehicle crashes account for half of the injuries, while falls cause 21%. Guns are the third most common cause at 12%, according to the association.

Millar at a recent fundraiser.

Jackie Millar's head wound was so devastating, that

physicians did not expect her to live. Following the shooting, her co-workers at the State Medical Society attended a staff meeting where a physician member tried to prepare them for the worst because their friend's chances of recovering appeared so slim. But somehow, after lying in a coma for weeks after the shooting, Millar came out of it. When she did, her vision was gone, muscle control was lost and communicating was very difficult.

After spending up to eight hours per day on various forms of therapy, Millar slowly began to make progress. Eventually, she was able to say goodbye to her wheel chair and start walking with a brace. And just recently, Millar even shed the brace.

"Walking was very difficult," Millar said. "Now, I can walk pretty good on my own. I have to go slow. I have to think about it, and I can do it."

Doctor Sperling also remembers how difficult Millar's initial rehabilitation was for her. "Just getting her to stand up was a Herculean feat. Her recovery was dramatic and gratifying," he said. And Sperling added that Millar herself is primarily responsible for her progress. "Most of it was plain old grunt work."

Millar's rehabilitation started from the most primitive level, just sitting on the floor and learning to balance herself. Then, the doctor would toss a ball to her to see if she could still maintain her balance. As soon as she was able to stand, the next step was to use a walker. "Once I mastered that, it was walking with a cane," Millar said.

Electrical stimulation techniques helped Millar regain muscle contractions so she could relearn to do the things we all take for granted, such as getting dressed, combing our hair or using the bathroom. Millar continues to do exercises in hope of restoring control of the right side of her body, where movement remains limited. During our recent conversation, she frequently used her left hand to straighten the right one, which appeared to close and turn involuntarily. This disability reminds her that she once was able to type 100 words per minute. "It was like magic," she said incredulously. Millar can now type only three words per minute.

But losing her typing skills is nothing compared to her vision loss. Millar's greatest hope is to regain her eyesight. "Sight is everything in the world, and I don't have it."

Her eyes remain perfectly healthy, but the bullet severed the pathway that connects them to her brain. When she came out of the coma, she was blind. Slowly, some vision returned when she looked downward. And then red, green, and blue colors eventually appeared.

Now, Millar sees everything, but it's all very blurry. Although she's hoping for improvement over time, she says her doctors are at a loss to explain how she can see at all, given the nature of her brain injury. Millar remains optimistic, nonetheless. "It's in God's hands," she said.

Jackie Millar has come a long way since that horrible day two years ago, but it's not as though she's coasting now. Just caring for herself has become a full-time job. [From] "the first thing when I get up, to the last thing I do when I go to bed, it's all hard work. No one realizes what it's like until they've been like that. I had to learn everything all over again," Millar said.

She's hoping that discussing her experience will teach young people about the senselessness of violence and how it can profoundly harm people for the rest of their lives. Millar believes speaking about her ordeal has made an impact on others, and also has been therapeutic for her.

Doctors applaud Millar's positive attitude and willingness to involve herself in the community again, saying such enthusiasm can only aid in her rehabilitation. On November 18, for example, Millar was the star attraction at a charity indoor golf event that raised $10,500 to bring the victims of violence together with young people, so they can see the ill effects first hand.

For her own part, Millar seems to have figured out how to deal with the many limitations that gunshot to her head has wrought. When it gets really tough, she relies on her sense of humor.

"It doesn't hurt to laugh at yourself when you're really frustrated, rather than taking everything so seriously." And Millar hopes her ascent from near death may help convince others with disabilities to remain hopeful.

"Don't give up. Keep on working hard. You can do it. Just try."

Focus on Rehabilitation

Assistive Devices: Empowerment Issues*

by Irma Fiedler, PhD

Assistive technology (AT) began with the first individual who used a stick as a means of augmenting mobility. The present state-of-the-art of assistive technology, with its focus on robotics and virtual reality, must represent the fulfillment of science fiction for persons born as recently as the end of World War II.

Assistive technology, in its truest sense, becomes not just an enhancer for those with a spinal cord injury, but a lifeline. It can permit individuals to be environmentally, vocationally, and emotionally empowered in a manner not thought possible during the past decade.

An assistive technology device has been defined as "any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve the functional capabilities of individuals with disabilities."[1] Internationally, those devices used as a means of assistance are conceptually differentiated as tools and appliances. Those devices that augment or assist a function are described as tools, while devices that replace a function are conceptualized as appliances. The term rehabilitation technology (RT) formalizes this taxonomy.[2]

It would appear that a comprehensive discussion of AT must include the following: the physiological and functional assessment/integration, the resource evaluation — possible AT options, the acceptance challenge, the training model, and the financial support feasibility. Unfortunately, particularly in a precarious health care environment, the financial support issues may take precedence over earlier essential therapeutic steps. According to O'Day and Corcoran,[3] concepts such as durable medical equipment (DME) and the classical definition of what is termed "medically necessary" may not support the reality of what people with disabilities need to be independent. The authors, in their comprehensive analysis of funding and support problems in AT, focus on the highly involved process of accessing funds to support the appropriate DME or assistive devices. There appears to be an absence of appropriate centralized resource systems. In addition, elements of fraud and abuse are not uncommon and inconsistencies exist within and between programs. Unfortunately, the ideal assistive technology, appropriately matched and accepted by the individual with a spinal cord injury, may not be feasible within the present funding guidelines. Accommodating what is feasible with what is necessary is truly a challenge for those interested in maximum empowerment.

As defined by Platts, et al.,[4] four areas can be delineated in assistive devices for high spinal cord lesions: mobility, manipulation, communication, and control of the environment. The authors stress the need for assistive devices even in those individuals with full-time caretakers. Since a device can free the carer for other duties, lighten the burden, and increase morale in the individual with a spinal cord injury, the most cost-effective approach would be to permit the support of maximum assistive technology.

Physiological and Functional Needs Assessment/ Integration

Inpatient evaluation of functional needs for the individual with a spinal cord injury must include extreme sensitivity to that person's fragile state following injury. Previous bias and prejudice which the individual may hold may seriously interfere with the willingness and acceptance level for assistive technology. empowering the individual at this early stage will permit decisions to be made with the patient rather than for the patient. This approach and sensitivity will assist in developing the individual as an enabler and self-advocate for future needs assessment. Dialogue focusing on the various needs and available alternatives at the conceptual level will enable the therapist, usually an occupational therapist, to elicit any preconceived fears or negative attitudes toward a particular device or means of augmentation.

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Welch et al.,[5] stressed the need for the assessment of a patient's lifestyle, skills, and desires before decision regarding AT are made, since a decrease in the use of earlier prescribed equipment upon community entry appears prevalent.

In a discussion of wheelchair adaptation, Bates et al.,[6] found a dissonance between the goals of the therapist and those of the patient. This conflicting status was evidenced by attitudinal shifts on the part of the patient, ranging from resistance to neutrality and, in some cases, detente. Studies have reported the lack of use of frequently prescribed assistive devices, such as splints and adaptive feeding and grooming equipment, for reasons other than attitudinal preference. One study,[7] cited the lengthy time required for appropriate placement of the device, while another study[8] found that improved physical function and alternative solutions were found, thereby diminishing usage of the device. More expensive devices, such as orthoses and ball bearing feeders, were devices which were retained most often. Perhaps more time and research is involved in the selection and fitting of an appliance, thereby accounting for its long-term retention.

Resource Evaluation/ Availability

The pairing of an assistive device with the user is, in a sense, almost a marriage. In the ideal situation, the assistive technology will fuse with the individual, generating a harmony of functionality. Personal adaptation, readily available and financially feasible, can be as simple as a splint or the modification of a trombone trigger using a ring instead of the usual trigger[9] operated by the thumb.

The various options in the field of AT are presently awe inspiring. From the classic mouthstick to virtual reality, the individual has a smorgasbord of alternatives, limited only by imagination and funding. O'Day and Corcoran[3] list the following display as representative of the myriad of available options.

DME and the needs of individuals with SCI is discussed, in depth, in a booklet developed by the American Spinal Injury Association.[10] Geared to the needs of the consumers, it provides providers and payors a resource to determine if equipment is feasible, realistic, and appropriate. The use of a comprehensive guide cannot be overstated in this complex environment of healthcare.

A state-of-the-art compendium on the use of assistive technology is available from the American Medical Association.[11] This resource includes extensive evaluation, referral, and prescription information and would be a definite asset in managing an assistive technology program.

Symington[12] described the recent innovations in assistive technology as a "megatrend in rehabilitation." An example of this megatrend can be found in functional electrical stimulation (FES),[13] a surface electrical means of potentially activating paralyzed limbs. Robotics, ranging from sensory feedback with a virtual headstick[14] to a gesture-programmed, multi modal rehabilitation robot,[4] offer an unimaginable future. Seamone and Schmeisser,[15] in a comprehensive discussion of microcomputer technology, discuss the essential requirements to fully assess the needs of quadriplegic patients with SCI. The use of a single, multipurpose device, such as a robot, requires discrete clinical evaluation. The authors evaluated the needs of patients and determined that items such as telephone usage, self-feeding, and typewriter usage (to include insertion and removal of paper) could be met by a multipurpose robot arm/worktable system. Robotics offers a window into a future of accessibility for individuals with SCI.

One example of the use of new technology, using new metals and including the assessment of a patient's individual needs and desires, is the design of a new prone cart.[16] As part of a National Institute on Disability and Rehabilitation Research (NIDRR) sponsored model systems grant, prototypes of a new, cost-effective, lightweight prone cart are now being tested by patients. The cart (Figure 1) allows the user to rest in an angled position, whereby he/she is better able to access the environment. Relieving back pressure, the altered position and torso support permits the adjustment of the front angles to achieve comfort. The torso support permits the free use of the individual's hands, thereby increasing functionality. The functional characteristics of the prone cart were developed as the result of discussions with patients and caregivers, individuals most aware of the criteria for need fulfillment. The portable aspects of the prone cart permit an environmental accessibility heretofore not available; the cart can be loaded into a van, thereby accessing the outside environment, i.e., shopping malls, restaurants, theatres.

The prone cart, developed by the Veterans Administration and refined under the NIDRR grant, is heavily influenced by recent adaptations in bicycle models. The large diameter, thin wall tubing is used to save weight and add an aesthetic balance to the vehicle. A type of bicycle model adaptation, the aerospace material "carbon fiber" recently appeared

Assistive Technology: Common Examples[3]

Mobility Aids
- walking canes
- crutches, walkers
- wheelchairs
- electric wheelchairs
- wheelchair cushions
- adapted seating systems
- car hand controls
- portable ramps
- wheelchair lifts for vans

Sensory
- white canes
- eyeglasses
- low-vision aids
- Braille writers
- hearing aids
- TDD's
- speech synthesizers

Prosthetics
- artificial legs
- powered arms and hands
- breast prosthesis
- eye prosthesis
- ear and nose prosthesis
- dentures

Orthotics
- hernia appliance (truss)
- hand splints
- back braces
- body jackets
- leg braces
- shoe orthotics
- orthopedic shoes
- elastic joint supports
- ostomy appliances

Self-Held Devices
- reachers
- one-handed can openers
- adapted utensils
- button aids

Home Equipment
- hospital beds
- alternating pressure mattresses
- lifters and transfer aids
- commodes, bedpans
- tub seats, shower chairs
- grab bars

Home Modifications
- lowered counters
- widened doors
- ramps
- wheelchair lifts
- stair lifts
- environmental control systems
- railings

Implantable Devices
- defibillators
- artificial hip & knee joints
- breast implants
- insulin pumps
- pacemakers

Miscellaneous
- TENS (transcutaneous electric nerve stimulators)
- home cervical traction
- edema compression sleeves
- oxygen generators

in wheelchair frames, having appeared for the first time in a bicycle frame no more than 6 years ago. The futuristic appearance of the prone cart addresses not only the cart's performance but also the image the vehicle projects, an important component in acceptance. As stated by the designer, translating performance technology into objects regarded as utilitarian, redefines the object, peoples' opinions/perceptions, and the attitudes of those who use the device. Changing an attitude from one of complacent utility to involved performance is significant to the user and to those who create the objects used.

Utilizing available methods to recreate objects of everyday use is the major focus of design research. The success of this new prone cart is simple restating an old object with new materials and perceptions. The prone cart, with its lightweight materials and aesthetically appealing color (hot red), appeals to the consumer and the provider. It was produced when a need was expressed and it was designed with input from the consumer, the designer, and the manufacturer. The cart will be environmentally tested before actual factory production takes place (Figure 1).

The Future: Research and Development

Training models, technical assistance, and outreach resource projects are two recent areas of research and development. Sponsored by the U.S. Department of Education, project TRANSTRAIN[17] is a transdisciplinary project to develop courses and guide design projects with internships, focusing on the development and use of assistive technology. This program is an attempt to formalize the training process by establishing a certificate program in assistive technology under the auspices of the Department of Special Education and Rehabilitation, San Diego State University, to complement an existing certificate program in supported employment and transition. Projects recently developed as part of this training program include: customized work stations for computer use; a custom-made vest harness for transportation of electronic devices; remote-controlled, self-locking, and unlocking automatic front door; an adapted lunch box; and telephone receiver modification. The development of

standardized curricula and the formalization of education mark significant gains in assuring that assistive technology services will be consumer-driven and expertly provided.

The development of a resource for rehabilitation robotics[18] represents significant progress in integrating services in assistive technology. The resource, funded by NIDDR, numerous research programs, and the A.I. DuPont Institute, is responding to the national need for dissemination of resources on robotic advancement. Projects to be developed in the resource center include an annual videotape, World Wide Web server, and varied newsletters, conferences, and communications.

Virtual reality is a world unto itself. It changes assistive technology from a tool, appliance, or device to an environmental assistance technology. Life satisfaction in the past for the individual with a spinal cord injury was dependent upon AT, carer limitations, and independent functioning. Virtual reality permits an individual who is disabled to have experiences which do not require physical functioning. Now one can ski, fly, and run without the necessary physiological supports, a world apart from restrictions. Virtual reality may truly change life satisfaction, goals, and achievements for an individual with a spinal cord injury.

The art of assistive technology is moving toward the establishment of a science of assistive technology. Developing better methods of assessing needs is as relevant as the development of sophisticated devices. It is the appropriate marriage of the consumer with the available resources which will ultimately result in consumer satisfaction and usage.

Editor's Note: Information on durable medical equipment (DME) for the patient with SCI is available from the American Spinal Injury Association at (404) 355-9772. For reacers wishing information on the state-of-the-art compendium on the use of assistive technology, the telephone number for the American Medical Association is (312) 464-5095.

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References

1. 20 USC Sec. 2201. *The Technology-Related Assistance for Individuals With Disabilities Act of 1988.*
2. Vernardakis, N., Stephanidis, C., & Akoumianakis, D. (1994) Rehabilitation technology product taxonomy: A conceptual tool for analyzing products and extracting demand determinants. *International Journal of Rehabilitation Research*, 17,201-214.
3. O'Day, B.L., & Corcoran, P.J. (1994). Assistive technology: Problems and policy alternatives. *Archives of Physical Medicine and Rehabilitation*, 75,1165-1169.
4. Platts, R.G., & Fraser, M.H. (1993). Assistive technology in the rehabilitation of patients with high spinal cord lesions. *Paraplegia*, 31,280-287.
5. Welch, R.D., Lobley, S.J., O'Sullivan, S.B., & Freed, M.M. (1986) Functional Independence in Quadriplegia: Critical Levels. *Archives of Physical Medicine and Rehabilitation*, 67,235-240.
6. Bates, P.S., Spencer, J.C., Young, M.E., & Hopkins-Rintala, D. (1993). Assistive Technology and the Newly Disabled Adult: Adaptation to Wheelchair Use. *American Journal of Occupational Therapy*, 47(11), 1014-1021.
7. Bhatt, K., Kohli, A., Melvin, J.L., & Maiman, D.J. (1987). Equipment Needs and Functional Use in SCI Patients. *American Spinal Injury Association Abstracts Digest*, 294-295.
8. Garber, S.L., & Gregorio, T.L. (1990). Upper Extremity Assistive Devices: Assessment of Use by Spinal Cord-Injured Patients With Quadriplegia. *American Journal of Occupational Therapy*, 44(2),126-131.
9. Potter, P.J. (1994). Modification of Trombone Trigger Allows Performance of the Trombone by Persons with Spinal Cord Inuuries. *Rehabilitation R&D Progress Reports*, 32,268.
10. American Spinal Injury Association (1993). Durable Medical Equipment for the Patient With Spinal Cord Injury. *A Task Force Report of the American Spinal Injury Association*, 2nd Edition.
11. American Medical Association (1994). *Guidelines for the Use of Assistive Technology: Evaluation Referral Prescription.*
12. Symington, D.C. (1994). Megatrends in Rehabilitation: A Canadian Perspective. *International Journal of Rehabilitation Research*, 17(1), 1-14.
13. Mizrahi, J., Isakov, E., Susak, Z., & Tirosh, E. (1994). Rehabilitation of Paralyzed Muscles by Surface FES. *Rehabilitation R&D Progress Reports*, 32, 96 (accessible through the local Veterans Administration office).
14. Harwin, W., Rahman, T., Salganicoff, M., Mahoney, R., Chen, S., Pino, D., Jayachandran, V., Yelamarti, A., & Glass, R. (1994). Improving the Functional Utility of Rehabilitation Robotics Through Enhanced Sensory Feedback: The Virtual Headstick. *Rehabilitation R&D Progress Reports*, 32, 137.
15. Seamone, W., & Schmeisser, G. (1985). Early Clinical Evaluation of a Robot Arm/Worktable System for Spinal-Cord-Injured Persons. *Journal of Rehabilitation Research and Development*, 22(1),38-57.
16. Malassigne, P., Sutton, C., Nelson, A.L., Binard, J., Bonifay, R., Schnurr, E., & Cors, M. (1994). Toward the Design of a New Prone Cart: A Pilot Study. *Rehabilitation R&D Progress Reports*, 32, 304.
17. Pumpian, I.R., Szeto, A.Y.J., & Sax, C.L. (1994). Trans-Train: Transdisciplinary Training of Rehabilitation Personnel in Assistive Technology. *Rehabilitation R&D Progress Reports*, 32,134-135.
18. Bacon, D., Phalangas, A., Piech, R., Harwin, W., Rahman, T., Foulds, R., & Sharp, C. (1994). Rehabilitation Robotics Technical Assistance and Outreach. *Rehabilitation R&D Progress Reports*, 32,138.

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Matching Technologies to the Needs of Persons with Disabilities

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Persons with physical and sensory disabilities have special needs that can be addressed with assistive devices and other enabling technologies. These technologies help persons with disabilities lead productive and fulfilling lives and function more or less independently. However, various impediments sometimes interfere with the acquisition and use of enabling technologies. Recognition of these impediments and identification of ways to overcome them was the focus of a meeting held in November, 1997 at Marquette University and cosponsored by the Medical College of Wisconsin. Expenses for the meeting were offset in part by a grant from the Retirement Research Association. Participants included representatives from manufacturers and distributors of enabling technologies, health care and educational organizations, and advocacy groups for the elderly and for persons with disabilities.

AMERICANS WITH DISABILITIES ACT: A STATEMENT OF SOCIETAL INTENTIONS

In 1990, the U.S. Congress passed the Americans with Disabilities Act (ADA). This legislation protects persons with disabilities from discrimination in any form. For such persons, the ADA extends civil-rights protection in the public and private sectors, transportation industries, public accommodations, services provided by state and local government, and telecommunications media.

In the ADA, a "person with a disability" is defined as anyone with a physical or mental impairment that substantially limits one or more major life activities such as caring for self, performing manual tasks, walking, seeing, hearing, speaking, breathing, learning and working. The definition extends beyond persons with visible handicaps to those with less obvious disabilities such as psychological disorders, learning disabilities, and chronic health problems such as epilepsy, diabetes, arthritis, cancer, cardiac problems, HIV infection and AIDS, or other conditions. An individual is considered to be a person with a disability if he or she has a disability, has a record of a disability, or is regarded as having a disability by one or more persons who should know.

Employers and administrators of educational and service organizations are required under the ADA to make "reasonable accommodations" for employees and service users to ensure nondiscrimination because of a disability. These accommodations may include:

- Active recruitment of qualified persons with disabilities for open positions.
- Changes in qualifying examinations and interviewing questions.
- Changes in training materials and policies.
- Provision of qualified readers or interpreters, as well as technology that enables individuals with disabilities to be fully functional within an employment or educational setting.

Any employment, educational or service setting should be able to document that there is(are):

- No exclusion on the basis of disability.
- No discrimination through contract.
- Participation in the most integrated setting possible.
- No discrimination through eligibility criteria.
- Reasonable modifications in policies, practices and procedures to avoid discrimination.
- Modifications to allow the presence and use of service animals.
- No discrimination through association with a person with a disability.
- No surcharges to cover the costs of accommodations imposed solely on persons with disabilities.

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• Benefits available to persons with disabilities without exclusion.

• No discrimination because of insurance constraints.

• No harassment or retaliation against individuals who are accessing their rights under the law or who are assisting people with disabilities in accessing their rights.

The Americans for Disabilities Act is landmark legislation that clearly articulates the civil rights of persons with disabilities. It defines the responsibilities of society and its agents and organizations to respect civil rights through fair employment, educational opportunities and service practices. It provides new opportunities for persons with disabilities, and reflects well on the intention of society to help persons with disabilities achieve full and productive lives.

BARRIERS TO ADA IMPLEMENTATION: THE ACQUISITION AND USE OF TECHNOLOGIES

In addressing the intent of ADA legislation, good intentions are necessary but not sufficient. Persons with disabilities need not only the right to access opportunities provided by civil rights legislation, they also need the ability to take advantage of opportunities through the use of enabling technologies. With the ever-growing sophistication and miniaturization of mechanical and electronic technologies, opportunities provided under the ADA are more accessible today than ever before for persons with disabilities. Technologies are now available to help the blind to see, the deaf to hear, and the lame to move, and they get better every year. Today, many persons with disabilities work, play, raise families and live fulfilling lives not unlike those pursued by persons without disabilities.

However, some individuals with disabilities are unable to achieve these goals even though technologies are available to help them do so. For these persons, the problem is not whether the appropriate technologies are available, the problem is the presence of barriers that prevent them from using the technologies.

The impediments have several forms. One of the most difficult is the cost of some technologies designed for persons with disabilities. These technologies are simply too expensive for many persons who need them. Frequently, they are custom-fabricated to meet the special needs of persons who will use them. These technologies fall outside the traditional marketing strategy of cost and price reduction through universal design and bulk sales. Whenever possible, this strategy should be applied to the development of technologies for persons with disabilities. Until it is, many persons with disabilities will be deprived of opportunities to live more productive and fulfilling lives through technologies designed to help them.

One way to increase the availability and reduce the cost of enabling technologies is to design them to be useful to everyone, not just persons with disabilities. Examples of this principle are telephones with large push buttons, talking clocks and watches, and lighting fixtures that turn on and off in response to handclaps or touch. These devices are marketed to the general public through retail outlets, but are of particular value to persons with disabilities. Through this marketing strategy, the cost of the technologies has been significantly reduced and their availability has been enhanced for everyone, including persons with disabilities.

Another major barrier for persons with disabilities is the complexity of assistive devices and other enabling technologies. Simplicity of use should be a strong guiding principle in the design of technologies. Devices that are too complicated, inconvenient or clumsy will be set aside because individuals will conclude that they are too difficult to use or that their use is not worth the effort.

Often these devices appear on used equipment lists with the notation "never used." In part this problem reflects the challenge of trying to match technologies specifically to the needs of individuals already frustrated with the need to cope with a disability. Simplicity of use and affordable cost are two guiding principles that should be pursued for all technologies potentially useful to persons with disabilities.

An additional challenge for many assistive technologies is the need for sustained training. Often the most effective trainers are persons with disabilities who have already mastered the use of a particular technology. These persons not only have a deep appreciation of the technology and its usefulness, they also can inspire the trainee to use the technology. Agencies selling assistive devices should be encouraged to employ persons with disabilities in their marketing and training efforts. In fact, companies manufacturing and marketing technologies for persons with disabilities may be missing the point if they do not have such persons on their payroll.

Another issue is the unavailability of replacement parts, or excessive delays in acquiring them.

This issue reflects the features of complexity and special design characteristics of enabling technologies, and reinforces the observation that many of the technologies are manufactured and distributed by small companies. Assistive technologies often go unused because they are broken or have a minor defect that cannot be quickly and easily repaired. Even when the procedure for repairing the problem is understood, delays in the acquisition of service can be enough of a deterrent to set the technology aside.

Programs for sales and exchange of used technologies are major resources for persons with disabilities. Exchange programs are available in a few states, including Arizona, Maine and Ohio, and some provide electronic listings of available technologies. Often, the programs are staffed by volunteers operating with resources provided by a local or state foundation. Every state and metropolitan area should establish such a program to facilitate access to technologies for those who need them.

A final challenge is the impact of health insurance and managed care plans on the provision of assistive devices and other enabling technologies to persons with disabilities who are enrolled in such plans. Everyone should examine his or her contract for health care coverage or provision to ensure that the cost of assistive technologies is covered. Plans that do not offer coverage are often a major impediment to access to technologies for persons with disabilities who need them.

CONCLUSIONS

The meeting concluded with the recognition that many issues remain to be addressed if the goals articulated in the ADA are to be achieved in practice. Participants agreed to expand the pursuit of these goals through various methods, including continuation of the dialogue and establishment of a closer working relationship between manufacturers and distributors of technologies, and persons and advocacy groups who represent the needs and interests of persons with disabilities. Focused discussion groups involving individuals with particular types of disabilities were recommended as one way to better understand the special needs of these individuals. Involvement of volunteer groups was recommended in the acquisition and exchange of technologies at the local and regional levels, together with improved training in the use of technologies for persons with disabilities. Students in physical therapy and rehabilitation engineering should interact directly with persons with disabilities so that their needs, abilities and difficulties can be better accommodated through improved products and educational programs. All of these recommendations have merit, and they are being pursued by the meeting's sponsors.

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Strategies for Fostering Communication between Physician and Patients with Disabilities

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As the elderly population increases, so does the number of persons with a disability. Consequently, many health care providers see some percentage of patients with disabilities and face the challenges of communicating with this sector of the population.

Disability is defined as a restriction in functional ability resulting from an impairment. Currently, some 35-million Americans have either chronic or injury-caused disabilities.[1] With the aging population, that number is likely to grow. Eighty percent of people over 65 have chronic conditions.[2] The rehabilitation medicine physician, who often is the primary care manager for people with disabilities, coordinates rehabilitation services for this growing population.

The major objectives of rehabilitation therapy are twofold, maximizing function and minimizing dependence. The bottom-line index of success is improving quality of life.[3] Although quality textbooks in the field abound, few address the critical importance of communicative skills for physicians dealing with patients with disabilities.

One (golden) rule of thumb applies to the communication process. Always remember that the patient with a disability is no different than anyone else, except for the simple fact that he or she has a disability.

As a health care provider, the clinician's approach to the patient with disabilities should place the patient's humanity first and the disability second. Word choice is often a potent reflection of this philosophy.

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Here are some ways to sensitize your vocabulary show respect for the patient with disabilities:

Common term	Preferred term
Disabled person	Person with disabilities
Stroke victim	Stroke survivor
Wheelchair-bound/ confined to a wheelchair	Utilizes a wheelchair
Has a birth defect	Has had a disability since birth
Normal persons	Those without disabilities

SOME SIMPLE STRATEGIES

- Use terms such as "persons with disabilities" or "people with impairments." These words demonstrate a greater degree of respect than the term "disabled persons." (See chart.)
- It is important to distinguish between disabilities (functional limitations) and handicaps (barriers to the performance of a specific task). For example, the same disability – the paralysis of one hand – would present a greater handicap for a professional pianist than for a professional singer.[4]
- Avoid all terms such as "stricken," "crippled," and similar words that convey an overbearing sense of catastrophic illness.

In all physician-patient communication, it is important for the clinicians to manifest empathy. Do put yourself in the position of the patient, but do not be overly dramatic or exhibit pathos. It is better to emphasize ability rather than disability, placing emphasis on those tasks the patient is able to perform.

In addition to displaying empathy, employing the following techniques may be useful in overcoming the communication barriers associated with specific types of disabilities.

MOBILITY

When talking to a patient in a wheelchair for more than a very short time, it is important to establish eye contact on the same level. This can be optimally achieved when the clinician pulls up a chair and sits down beside the person in a wheelchair. One should not, however, lean on the wheelchair, since it is part of the person's personal space and ought to be respected accordingly.[5]

Remember that a person with disabilities is still master of the timing and direction of his or her movements; do not, for example, lift patients onto the examining table without asking if they want help. Also never, begin pushing a wheelchair without permission. An unexpected push could actually throw the wheelchair user off balance.[6]

HEARING

If an interpreter is helping you speak with a deaf person, it is best to talk to the deaf person and not the interpreter.[7] When communicating with a deaf person without an interpreter present use normal tone and rhythm of speech. The normally rapid speaker should consciously slow down. Use of paper and pencil is to be encouraged, in addition to pointing, gesturing, and even pantomime, as a means of fostering communication. Never assume that the patient understands your words.

Hearing amplification devices (e.g., an amplifying headset or a battery-powered amplifier with a small microphone) can be a great help in medical interviewing.[8]

SPEECH

It is all right to ask people with speech disabilities to repeat what they said if you have not understood them initially.[9] Be careful not to nod unless you understand fully.

Maintaining direct eye contact – no matter how aspasic the patient – exhibits respect.

Allow the patient plenty of time to "get the words out." As Arthur Josephs, a stroke survivor, wrote in a recent issue of *Stroke Connection*, "One of the greatest gifts a caregiver can provide is understanding patience while a survivor struggles to find his or her voice."[10]

SIGHT

A physician can make things easier for patients with vision impairment by keeping in mind the following:[11]

- Try to make your office a more user-friendly place: provide adequate lighting, avoid crowding, go for contrast, use labels and markings freely, and prevent glare.
- Provide large-print reading matter and adjustable lamps to illuminate the material. Place low magazine tables between chairs, not in the center of the room.
- Confirm appointments and write appointment cards and patients' instructions in black ink. Remind the appointment secretary in advance that a particular patient has low vision.
- Encourage staff to act as sighted guides and to speak specifically and clearly.

The secret of communication with patients with disabilities is well summed up in a guide published by the Easter Seals, "Treat a Person with a Disability the Way you Like to be Treated." Physicians and patients together can overcome communication barriers with common sense, sensitivity and a creative touch.

REFERENCES

1. Delisa JA, Gans BM. *Rehabilitatian Medicine Principles and Practice*, 2nd Ed. JB Lippincatt Campany. 1993.
2. Felsenthal G, Steinberg F, Gorrisan S, eds. *Rehabilitatian af the Aging and Elderly Patient.* Williams and Wilkins, 1993.
3. Yaung MA. Making the Most af What Yau've Gat–A Strake Rehabilitatian Creda. *The Strake Cannectian.* March/April 1994,3.
4. Steins SA, O'Yaung B, Young, MA. The Persan, Disablement and the Process of Rehabilitatian. *PMR Secrets.* Honley & Belfus, 1997.
5. Scholtz Medical Center. What da I da when I meet a person in o wheelchair? A guide ta wheelchair etiquette. Kimball & Ridgeway, Waterlaa, Iawa (2 pages).
6. Scholtz Medical Center. What da I da when I meet a person in a wheelchair? A guide ta wheelchair etiquette. Kimball & Ridgeway, Waterloo, Iowo (2 pages).
7. Easter Seals. When yau meet friends with disabilities (ane page).
8. Fayee EE, Matersan RS, Zazave P. Help people with disabilities ta help themselves. *Patient Care* Jonuory 30, 1994, 65-78 (includes an extensive list of resaurces far helping persans with disabilities).
9. Easter Seals. When yau meet friends with disabilities (ane page).
10. Jaseph A. The raad ta success requires canstructian, *Strake Cannectian*, March/April 1994,7.
11. Fayee EE, Matersan RS, Zozove P. Help peaple with disabilities ta help themselves. *Patient Care* January 30, 1994, 65-78 (includes an extensive list af resources far helping persans with disabilities).

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Principles of Musculoskeletal Sports Injury Rehabilitation

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The capacity of clinicians to make use of basic rehabilitation measures in responding to the needs of injured athletes has not been universally accepted, even in recent years. The skepticism about physicians' ability to appropriately treat the athlete was depicted by Dr. George Sheehan when he wrote in the late 1970s "The jogger has three natural enemies: drivers, dogs and doctors."[1] These concerns resulted from the common treatment approach consisting of prolonged rest, abstinence from athletic participation and inadequate rehabilitation.

Nevertheless, recognition of the importance of applying rehabilitation measures in the treatment of sports injuries is certainly not a new concept. For instance, the use of therapeutic exercise in the treatment of athletic injuries began as early as 1000 BC by the Hindus and Chinese.[2] Hippocrates (460-370 BC) reportedly advocated exercise as an important factor in the healing of injured ligaments[3] and advised the use of cold as a therapeutic modality.[4]

It is now clear that the treatment of most musculoskeletal sports injuries is nonsurgical, and is largely based upon rehabilitation measures. Even in the small percentage of injuries that require surgical intervention, appropriate rehabilitation measures should be provided following surgery. As a result, the application and scientific validation of rehabilitation techniques has been an important focus of sports medicine clinicians and scientists in recent years.

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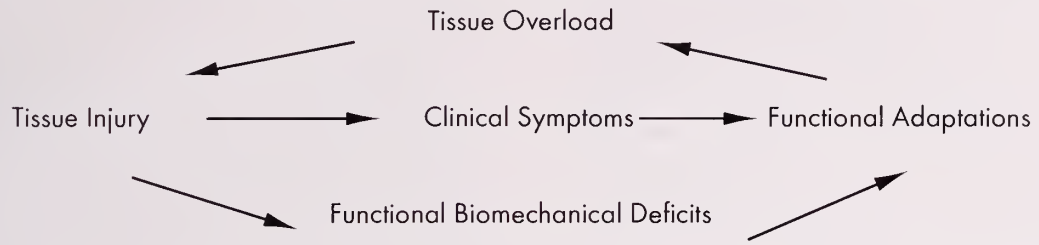
The principles applied in the rehabilitation of musculoskeletal sports injuries are largely based upon an understanding of functional biomechanics, tissue healing, the physiological effects of disuse, strength and aerobic training, and therapeutic modalities. The purpose of this article is to discuss the concepts forming the foundation for the principles of rehabilitation for athletic injuries of the musculoskeletal system, and provide the reader with a conceptual framework for treatment of the athletes with these injuries.

CHARACTERIZATION OF INJURIES

Athletic injuries may be characterized in multiple ways. One useful manner of characterizing injuries is by mode of clinical presentation.[5] The four general categories of clinical presentation are: 1.) acute injury, 2.) chronic injury, 3.) acute exacerbation of a chronic injury, and 4.) subclinical functional alteration. Inclusion of the final category reminds us to be cognizant of functional adaptations that may result following even minor tissue insult.

Another valuable approach to characterizing athletic injuries involves detailed identification of the underlying sources producing clinical symptoms. This approach is based upon a tissue injury cycle that includes five components[6] that contribute to the production or continuation of clinical symptoms (Figure). Following an acute injury that is inadequately treated, or in the presence of a chronic injury, these components become part of a vicious cycle. Under some conditions, subclinical functional adaptations may occur prior to the manifestation of clinical symptoms. Once sufficient tissue damage has occurred, clinical symptoms develop. While the tissue may undergo repair, and symptoms may even temporarily resolve, other local changes (i.e., reduced range of motion, weakness, impaired proprioception) may result in functional deficits. Functional adaptations may be required for the athlete to continue participation. These adaptive patterns can result in additional tissue overload and put the athlete at risk for decreases in performance, re-injury, or the development of new injuries.

Figure. The vicious cycle of tissue injury (modified from Herring[7] and Kibler[5]).



Rehabilitation must therefore address all components of the tissue injury cycle.

PHYSIOLOGY OF SOFT TISSUE HEALING

Damage to soft tissue – including muscles, tendons and ligaments – accounts for the vast majority of sports-related injuries. Therefore, a basic understanding of soft tissue healing is critical for the clinician involved in the treatment of athletes. While the structure and function of muscles, tendons and ligaments vary, the healing process for these structures is remarkably similar.[8,9] Even damaged muscle fibers, which appear to have an inherent ability to regenerate,[10] appear to heal largely by formation of scar tissue.

The process of soft tissue healing has been commonly divided into three phases: 1.) inflammatory phase, 2.) repair phase, and 3.) remodeling phase.[11,12,13] While this division is useful conceptually, there is considerable overlap of events throughout the different phases. The process of soft tissue healing will be briefly reviewed here.

Inflammatory Phase. The inflammatory phase follows injury and may last for up to 72-hours depending on the severity of the injury. This phase consists of a non-specific reaction involving a complex interaction between humoral and cellular components mediated in part by complement components and various prostaglandins.[14] Although not always clinically recognized, the classic hallmarks of the inflammatory phase include swelling, redness, warmth, and pain.

Damage to blood vessels and collagen fibers results in hemorrhage and initiates an immediate humoral response, including the clotting cascade and release of vasoactive and chemotactic factors. Edema formation results from local vasodilation and increased capillary permeability. Within hours, there is an influx of inflammatory cells to the zone of damage. These inflammatory cells include mononuclear phagocytes which release numerous biologically active substances including prostaglandins and cellular growth factors. These cells are also involved in the removal of damaged tissue by phagocytosis and the release of hydrolytic enzymes, and mediate fibroblast proliferation. Revascularization begins by endothelial budding to form thin walled sinuses extending into the damaged tissue in a fine network, later differentiating into capillaries, arterioles, and venules.

Repair Phase. This phase may begin by 48-hours, continue for up to six weeks, and is characterized by the synthesis and deposition of collagen. Collagen is produced by fibroblasts which are observed in increasing numbers within the injured area near the end of the inflammatory phase. For collagen synthesis to occur, the availability of oxygen, iron and ascorbic acid is necessary.[9] Tissue motion and local stresses influence the production of collagen by fibroblasts.[8] Animal studies have also suggested that local application of ultrasound may enhance collagen deposition.[15,16]

Remodeling Phase. The remodeling phase may be initiated by three weeks and continues for over 12 months. During this period, collagen undergoes remodeling to increase its functional capacity to withstand stress. Conceptually, the remodeling phase begins after new collagen fibers have bridged the injured zone, but the lattice of collagen is still a disorganized gel structure with very little tensile strength. There is actually considerable merging of the repair and remodeling phases.

The increase in scar strength that occurs over time is attributed largely to the reorientation of collagen fibers along the lines of stress. Development of collagen crosslinks probably also plays some role in increasing tensile strength of the scar. Small stresses on the healing wound are important in promoting this increase in strength,[17,18] but the mechanism by which this process occurs is as yet unknown.[8] Collagen also has the inherent capacity to contract for several weeks following an injury. This results in gradual shrinkage of the scar as well as reduced extensibility.

Connective tissue healing is affected by the original severity of structural damage, age of the individual and the nature of the injured tissue.[13] The biochemical and mechanical properties of injured connective tissue may never fully regain the characteristics of normal tissue even after prolonged periods of healing. Rabbits that received experimental ligament injuries showed persistent changes in both the quantity and quality of collagen and noncollagenous matrix after 40 weeks of untreated healing.[19] Furthermore, the load at failure of the bone-ligament-bone complex plateaued at approximately 60% of the expected levels.

A review of the physiology of soft tissue healing identifies three key points of clinical importance. First, the initial inflammatory phase of healing following injury is critical to the restorative process. However, if this initial phase is excessive or prolonged, the extent of tissue damage associated with the injury may be increased, healing is delayed, and some degree of chronic disability may even result. Second, early controlled mobilization will enhance the healing process by increasing the deposition and strengthening of the scar tissue. Mobilization is also important in counteracting the collagen contraction during the remodeling phase so that range of motion is maintained. Third, it should be recognized that injured connective tissue may never fully regain its original structural integrity.

ADVERSE SECONDARY EFFECTS OF IMMOBILIZATION AND INACTIVITY

Providing a recommendation of prolonged and complete rest to a serious athlete with an injury will likely create a non-compliant patient. Fortunately, complete or prolonged inactivity is rarely necessary. Nevertheless, modification of activities is an important aspect of the early management of many sports injuries. Restricted use of an acutely injured structure will limit hemorrhage, edema formation and the immediate risk of re-injury. In bony or serious soft tissue injuries, or following surgical intervention, prolonged restrictions may be essential, but exercises not placing the injured structures at risk can generally be continued by the athlete.

The adverse effects of restricted activities should be recognized so that they may be minimized as much as possible during the rehabilitation of an injured athlete. Restricted activities following injuries may induce undesirable changes much more diffuse than the local nature of an injury. For instance, hip musculature strength and recruitment patterns have been shown to be altered for months following ankle sprains.[20,21] Complete rehabilitation of an injured athlete requires not only recovery of the injured tissue, but also recovery from the secondary effects the injury induced on other parts of the body. Minimization of these secondary effects will allow the athlete to return to sports participation sooner and with less likelihood of re-injury.

Muscular Strength and Endurance. Several studies have demonstrated a significant strength reduction following immobilization.[22] Strength may drop by as much as 20%-30% during only 7-9 days of complete immobilization.[23,24] Bed rest has reportedly been found to decrease strength by 1.0%-1.5% per day.[24] Type I (slow twitch) fibers appear to be particularly affected in the early stages of immobilization with there being a decrease in fiber diameter and percentage of type I fibers, and decrease in oxidative enzymes.[22,25] As a result, muscular endurance is seriously reduced along with strength.

Cardiovascular Fitness. It is well known that prolonged bed rest results in detraining. Saltin and co-workers[26] demonstrated a 27% decrease in maximal oxygen uptake of normal, healthy young males during a three-week period of bed rest. Some of the deleterious effects of bed rest on cardiovascular function can occur rather quickly. For instance, the reduction in plasma volume that occurs after only one or two days of bed rest results in a lower maximal stroke volume and cardiac output.[26] It should also be realized that the rate of recovery of cardiorespiratory fitness may be even slower than the rate of loss that occurs during detraining.[26]

Bone, Joints and Soft Tissue. Immobilization results in considerable bone, cartilage, joint, and soft tissue changes. Inactivity results in atrophy and reduction in breaking strength of bone.[27]

The development of these changes actually begins fairly rapidly with increases in urinary and fecal excretion of calcium and phosphorus occurring within the first few days of inactivity.[28,29]

Immobilization also results in biochemical and mechanical changes in fibrous connective tissue. Chemical changes in ligaments have been observed after just two weeks of immobilization.[30] After eight weeks of immobilization, bone-ligament-bone preparations of primates showed a decrease in load to failure and an increase in extensibility.[31,32] Furthermore, there was incomplete recovery after 12 months of resumed activity. The strength of surgically-repaired ligaments is also impeded by immobilization compared with exercise.[17]

Joints are not immune to the effects of immobilization. Inactivity results in reduced extensibility of the periarticular connective tissue.[33,34,35] In addition, articular cartilage is especially susceptible to the effects of immobility and disuse since cartilage receives its nutrition through joint motion and compression. Rabbit studies have shown changes in the histological characteristics of cartilage within one or two days of immobilization,[36] and irreversible degenerative changes to cartilage after eight weeks of immobilization.[34]

Proprioception and Coordination. Coordination of multimuscular activities is a learned, trainable skill that is required for athletic activities. It is thought that the neural patterns used to perform certain skilled activities may be negatively affected by immobilization.[37] This is supported by the decrease in integrated electromyographic activity and reduced synchronization of contraction demonstrated with immobilization and detraining.[38]

Coordinated movements are aided by intact proprioceptive sensation. Potential sites for generation of afferent proprioceptive signals include the muscles, joint capsules, ligaments and skin. Direct damage to these proprioceptive receptors from joint or muscle injury and surgical procedures may be responsible for a decrease in proprioception.[39,40] While proprioception can be improved with appropriate rehabilitation measures, prolonged inactivity will delay recovery.

Table 1: Goals of rehabilitation.

- Establish an accurate and complete diagnosis
- Allow proper healing of the injured tissue
- Minimize deleterious local effects of the injury
- Maintain other components of fitness
- Return to normal or optimal athletic function
- Prevent reinjury, if possible

REHABILITATION CONCEPTS

The objective of sports injury rehabilitation is to restore the athlete to normal or optimal athletic function. In accomplishing this objective, several goals should be met (Table 1). First, an accurate diagnosis must be established in order to apply appropriate rehabilitation measures. A complete diagnosis should include identification of each component of the tissue injury cycle. Proper healing of the injured tissue must be allowed, realizing the potential presence of a period of vulnerability to re-injury. Nevertheless, throughout the rehabilitation process it is critical to minimize the deleterious local side-effects of the injury and maintain other components of fitness. Prior to return to play, the athlete should be restored to normal athletic function and preventative measures should be applied when possible. The benefits from application of proper rehabilitation measures include a shortened recovery time, optimized athletic performance, and reduced likelihood of re-injury.

Successful rehabilitation depends upon a number of factors beyond the nature of the injury. Adherence to the rehabilitation program depends upon personality characteristics of the athlete, aspects of the rehabilitation setting, and the quality of the relationships developed between the athlete, coach and treatment team.[41] Maintaining motivation of the athlete is an essential element to success. Education and goal setting are also key elements. The athlete deserves to be educated about the nature of the injury, the recommended treatment regimen, and expected prognosis. Development of individualized rehabilitation goals based upon the type and extent of injury and the athlete's level of competition will help eliminate frustration and discouragement by the injured athlete.

The rehabilitation process can be divided conceptually into three phases: 1.) acute management, 2.) recovery rehabilitation, and 3.) late management. The relative emphasis on each phase will depend upon the type and extent of the injury. Acute injuries will frequently require a greater emphasis on control of inflammation, while chronic injuries will require more emphasis

an the ather rehabilitatian phases. Nevertheless, the general appraach autlined here can be applied ta all injuries, including thase injuries which have required surgical intervention.

ACUTE MANAGEMENT

The acute management phase is directed at cantral and reduction of edema and hemarrhage, reductian af pain, and pratectian fram re-injury. This phase af rehabilitatian cantinues until eliminatian ar minimization of joint effusian and/ar interstitial edema has accurred. Far many saft tissue injuries that receive early and appropriate interventian, the duratian af this phase can be limited ta 48-72 hours.

Limiting the initial develapment af joint effusian ar lacal swelling follawing injury will speed the recavery pracess. An example demonstrating the impartance af contralling jaint effusian is the reflex inhibition af the quadriceps that has been abserved fram a knee effusion af anly 20-30 ml.[42] The disuse and resultant quadriceps muscle wasting due ta knee joint effusian retards the rehabilitatian process and may lead to changes in the mechanics af joint matian resulting in secondary disarders.[43]

The treatment of the inflammatory respanse fallawing injury is based upon the premise that the bady's reactian to injury is excessive. The standard camponents af initial treatment have classically included ice or cryatherapy, compressian and elevation fram which the cammanly recagnized acranym "ICE" is derived. The acranym "RICE" is aften used with the additianal letter standing far rest. Hawever, it shauld be recagnized that taking the appraach of pratecting the injured structures fram additianal injury and madifying the activities is preferred aver rest.

While the physialagical faundation far the use af cold is nat entirely clear, it is believed that the effects af cold applicatian include a reductian in inflammatian, edema farmation and hemarrhage due to lacal vasocanstrictian and a decrease in blood flaw.[4] For this reason, cald applicatian wauld seem likely to be most effective if used early after injury. In fact, Hacutt and cawarkers[44] demanstrated that cryatherapy initiated within 36 haurs after injury resulted in a quicker return to full activity than cryotherapy begun after 36 haurs af injury. Other clinical studies have further supparted the effectiveness af early cold application.[45] In the later phases af rehabilitatian, cald applicatian may serve ta cantral swelling induced by the exercise program. Cald may also be effective in tempararily reducing pain by decreasing nerve canductian velocity and regianal muscle spasm.[4]

Recammendatians about the duration and mode af applicatian af cald is largely based upon empirical clinical evidence. It is generally believed that cald applicatian far 10 ta 20 minutes several times per day is effective and safe.[11] Cald applicatian is rarely cantraindicated except in individuals with Raynaud's disease, cold allergy, cryaglabulinemia and paroxysmal cald hemaglabinuria. A few cases af cryatherapy-induced peripheral nerve injury have been reparted in the literature, but it is thought that this camplicatian can be avaided by limiting the cald application to 20 minutes.[46]

It is widely advacated that cryatherapy shauld be combined with ather early camponents of treatment, such as the applicatian af external campressian and elevatian, far controlling edema farmatian.[47] Interestingly, a recent study has suggested that in the past-acute phase, elevation may be mare beneficial than campressian in reducing edema.[48]

When symptoms allaw, early pratected mabilizatian may be beneficial in making use af the "muscle pump" to help remave edema. Cryakinetics is a technique intraduced by Grant[49] and Hayden[50] that has been used ta initiate early mobilizatian. This technique invalves local cald applicatian fallawed by pratected range af motion and mabilization exercises. It is thaught that benefits af cryakinetics relate ta early mabilization allawed by temparary pain contral fram the cald applicatian. While cryokinetics has been professed as having good results, rigorous scientific investigatian af this technique is lacking.

Neuramuscular electrical stimulation is anather madality that may be useful in the early management af injuries. Pulsed electrical stimulatian is thought ta be a passive method af activating the "muscle pump" ta cantral edema.[51] Transcutaneaus electrical nerve stimulation (TENS) is anather electrical stimulatian modality that has been used as an adjunct ta other pain management techniques.[52,53]

Nansteraidal anti-inflammatary medicatians are cammanly prescribed fallawing acute musculaskeletal injuries far cantral af pain and swelling. However, the assumptian that these medicatians result in a quicker recovery has nat been unifarmly supparted by the scientific literature.[45,54,55,56] It has been suggested that their analgesic effect may indirectly allaw earlier matian and use which may

stimulate early healing.[54] However, animal studies have suggested that nonsteroidal anti-inflammatory medications may actually interfere with wound healing.[55,57] For this reason, it has been advised that these medications be initiated promptly after injury and only used for a short time since they may interfere with the subsequent repair and remodeling of the tissue.[11,58]

Protection from re-injury is an important component of the early management of sports injuries. As previously indicated, "modification of activities" rather than "rest" is the approach to be taken with the athlete. Exercise modalities that do not stress the injured structure may allow the injured athlete to continue cardiovascular and strength training. The use of protective braces or taping may expand the activities that the athlete can safely perform in the early phase of rehabilitation.

RECOVERY REHABILITATION

The objective of the next phase of rehabilitation is to promote the reparative process and restore normal range of motion, muscular strength and endurance, cardiovascular fitness, and proprioception. In this phase, gradual mobilization is performed with care to avoid any further damage to the injured tissue. Optimal healing conditions require a balance between activity and protection. Unfortunately, there is no objective test to guide the clinician during the progression of recovery rehabilitation. Clinical judgment and experience with attention to the athlete's pain and swelling, as well as knowledge of the process of tissue healing, are the guides for success.

Restoration of joint range of motion and soft tissue extensibility can be achieved through a progressive program that may utilize a number of different techniques. Careful passive techniques may be followed by active-assist and then active range of motion exercises. The athlete must be instructed to develop a sense for the tissues being stretched to assure that appropriate positioning is used. The athlete must also understand that some discomfort may be required for adequate stretching to result, but prolonged post-stretching pain is indicative of an overzealous approach.

Avoidance of fast rates of stretching, as is the case with ballistic stretching, is advisable particularly during the early phases of rehabilitation. At fast stretch rates, greater tensions are developed and more energy will be absorbed within the muscle-tendon unit for a given length of stretch.[59] This results in a greater risk for injury. Although the optimal time to hold a static stretch and number of stretches that should be performed is not known, experimental studies on animals suggest that the majority of stress relaxation takes place during the initial 12-18 seconds and there is little alteration in muscle-tendon unit lengthening after the fourth stretch.[59]

Included among the various approaches to enhancing range of motion are the proprioceptive neuromuscular facilitation (PNF) techniques.[60,61] Simultaneous stretching and brief application of fluorimethane spray or passage of ice along the course of the muscle being stretched may also enhance the resolution of muscular restrictions in motion.[62] It should also be remembered that the distensibility of tissue is improved with tissue warming.[63,64,65] Ultrasound is the best therapeutic modality for heating deep-lying tissues,[66] but one should not neglect to take advantage of the elevation in tissue temperature that results from active aerobic exercise.[67] In initiating deep heating modalities, one should be observant for increased hemorrhage or swelling which should serve as an indicator that these modalities should be discontinued.

Muscular strength refers to the ability of a muscle group to maximally exert force, whereas muscular endurance is related to the ability of a muscle group to apply a submaximal force over an extended period of time. It is obvious that muscular strength and endurance should be restored prior to return to sport for prevention of re-injury and optimization of performance. However, the importance of restoration of muscle function for injury prevention may extend beyond the issues related to enhancing tissue strength. For instance, it has been demonstrated that knee joint position sense significantly decreases after fatiguing contractions of the knee extensor and flexor muscles.[68] This might suggest that a deficit in muscular strength and endurance could place an athlete at a greater risk of injury from impaired proprioception.

Restoration of muscular strength and endurance may begin with isometric exercises as soon as they can be performed without pain. Dynamic exercises can be carefully initiated with active range of motion and manual resistive techniques prior to progression to the use of isokinetic, isotonic and/or variable resistance devices. Elastic bands are extremely practical for application of graded resistance, and are especially useful in designing home exercise programs although they may not always provide appropriate resistance for strengthening purposes. Throughout this process it is important to have the

athlete wark within the pain-free range af matian.

The aptimal regimen far impraving muscular strength and endurance is nat knawn. Currently, a number of different weight training appraaches are in use with little abjective evidence that ane appraach is better than anather. It appears that aptimal strength gains occur when muscle is activated at an intensity af 60-80% of maximum for several sets af 6-12 repetitians.[37] Strengthening appears most effective when training is perfarmed three ta faur times per week, avaiding strength training af the same muscle graup on consecutive days. In cantrast ta the requirements for gaining strength, maintenance af strength prabably requires anly ane ta two training sessians per week.

The initial gains observed during a strength training pragram are attributed ta neural adaptatians while later increases in strength are largely the result of muscular hypertrophy.[38] Since some af the strength gains are due ta neural adaptatians, the respanse ta strength training appears ta be very specific to the training exercise.[37] Therefore, emphasis shauld be placed an keeping the strength training as spart specific as possible. Such factors as the mavement pattern, velacity af movement, and type af cantractian (i.e., cancentric vs. eccentric), are impartant ta consider in designing the rehabilitation strengthening pragram.

Considerable emphasis is naw placed on functianal strengthening exercises including clased kinetic chain exercises. The ca-cantractian af muscle graups that accurs with clased kinetic chain exercises makes these types of exercises particularly useful. For example, the ca-cantractian af hamstring muscles during clased kinetic chain knee rehabilitatian exercises reduces the stress an the anteriar cruciate ligament (ACL) and shauld allow earlier and safer strengthening activities fallawing ACL injury ar surgery.[69] Clased kinetic chain knee rehabilitatian exercises alsa seem ta induce fewer symptams related ta the patellafemaral jaint and can be designed far hame pragrams resulting in an impraved canvenience and reduced cast far the patient.[70]

Fram the preceding discussian on the adverse effects of immabilization and inactivity an soft tissue, it shauld be apparent that strengthening exercises can play a greater role than merely increasing muscular perfarmance. Indeed, resistance training promotes an increase in the strength of ligaments, tendans, tendan ta bane and ligament ta bane interfaces, jaint cartilage and the cannective tissue sheaths within muscles.[71] These benefits are impartant ta recagnize far bath rehabilitative as well as preventative purpases.

Cardiorespiratary fitness is critical in the successful perfarmance af sparts which rely heavily an aerabic metabalism. Far athletes wha participate in these types af sports, aerabic exercise shauld be resumed as saon as passible in the rehabilitation pragram. In general, cardiorespiratary training invalves using a large muscle mass in a rhythmic fashian at intensities of 60-90% af maximum heart rate.[72] Frequently, the athlete's usual aerabic training mode will need ta be substituted with a different made, but effarts should be made ta keep the exercise as spart-specific as passible. In same cases an athlete may be progressed thraugh different aerobic exercise mades as the rehabilitation pragram praceeds. As an example, a distance runner with a lawer extremity injury may initially be placed an a swimming pragram, and pragressed ta running in the paal ar cycling befare returning ta running.

Fallowing ligament injuries ar pralanged periads af immabilizatian, prapriaceptive training should be initiated as saan as adequate range of matian and strength are present. Prapriaceptive exercises have been demanstrated ta reduce the prapriaceptive deficits present after ligament injuries.[73,74,75] The impartance af impraving propriaceptian has been demanstrated by the finding af a significantly greater risk af sustaining an ankle injury during saccer among players with abnarmal prapriaceptive testing campared with those players with narmal values.[76] Barrett[77] has cancluded that return to spart after an anteriar cruciate ligament injury may be even mare dependent an propriaceptian than an ligament tensian. Classical lawer extremity prapriaceptive exercises have used the tilt baard ar ankle disc, and with same creativity spart-specific prapriaceptive exercises can be develaped.

LATE MANAGEMENT

The final phase af rehabilitatian is directed at assuring that the athlete is ready ta safely return ta his or her spart. Priar to return to play, the athlete must be capable af perfarming all the activities required by the spart, the cause af the injury should have been addressed and carrected if passible, and apprapriate preventative measures shauld be instituted.

In preparing the athlete to return ta competitian, a functianal progressian may be used.[78,79] This is actually an extensian of the functianal strengthening, endurance and propriaceptive

exercises that have been initiated during the recovery rehabilitation phase. The functional progression involves gradual incorporation of more advanced sport-specific drills. At the completion of this program the athlete has demonstrated adequate fitness, strength, flexibility, joint stability, coordination, and confidence to perform the tasks demanded by the sport.

Sports injuries occur as the result of the summation of various intrinsic and extrinsic factors.[80,81] Intrinsic factors include the physical and psychological characteristics of the athlete. Extrinsic factors include the demands of the particular sport, level of competition, equipment used, coaching techniques, and playing conditions. Since there is clearly an increased risk of re-injury following certain types of injuries,[80,81] it is important to avoid underestimating the severity of an injury, provide adequate rehabilitation, and attempt to address the factors that were involved in the initial injury.

For many injuries, an evaluation of the biomechanics of the activity in which the athlete participates is essential in making a complete diagnosis and fully correcting the etiology of injury.[82] Examination of the biomechanical issues will allow for intrinsic factors such as inadequate strength, strength imbalances or inflexibility to be addressed. Injury risks related to extrinsic factors may also be reduced by making appropriate equipment changes and improvements in technique.

The rehabilitation program is completed by addressing preventative measures with the athlete. The potential role in prevention of injury achieved from pre-activity warm-up, cool-down and stretching should be discussed.[83,84] The importance of an appropriate training regimen, the early detection of injuries, and full rehabilitation after injury in avoiding recurrence of injury should be emphasized. Prior to return to play, the use of protective equipment, braces or taping should also be considered.[85,86] With regard to ankle sprains, it should be recognized that taping has been demonstrated to lose as much as 40% of its supportive strength after 10 minutes of exercise[87] and offers no significant support after one hour of exercise.[88] Bracing is thought to be more effective for prevention of ankle sprains, having been demonstrated to significantly reduce the incidence of sprains in previously sprained ankles.[89]

Determining when an athlete is capable of returning to competition following an injury is sometimes challenging. A number of factors must be weighed in this decision including an estimate of the tissue re-injury vulnerability and the expected demands to be placed on the injured structures with return to sport. In addition, a subjective sense of the athlete's psychological readiness to return to play should be assessed. The guidelines in Table 2 will assist in applying more objective criteria. By fulfilling these criteria the athlete will be at a lower risk for sustaining a re-injury or new, possibly more severe, injury. Nevertheless, these criteria are "optimal" and may not always be achieved prior to allowing an athlete to return to competition.

Table 2: "Optimal" criteria for return to play.

- Clinical symptom complex resolved
- Tissue injury complex resolved
- Full range of motion present
- Muscular strength and endurance adequate
- Able to perform sport-specific activities
- Cause of injury corrected

CONCLUSION

The treatment of most sports injuries relies upon the utilization of rehabilitation measures. Design of optimal rehabilitation programs for the injured athlete requires a general appreciation for the needs of athletes as well as an understanding of functional biomechanics, tissue healing, the physiological effects of disuse, exercise physiology, and therapeutic modalities. Application of rehabilitation measures based upon our current understanding of these areas can result in a shortened recovery time, improved athletic performance, and reduced likelihood of re-injury. Nevertheless, much remains to be learned from further scientific investigations into these areas that provide the foundation for sports injury rehabilitation.

REFERENCES

1. Sheehan GA. Running and Being: The Total Experience. New York: Warner, 1978.
2. Snook GA. The history of sports medicine. Part 1. *Am J Sports Med* 1984;12:252-254.
3. Clayton ML, Weir GJ. Experimental investigations of ligamentous healing. *Am J Surg* 1959;98:373-378.
4. Meeusen R, Lievens P. The use of cryotherapy in sports injuries. *Sports Med* 1986;3:398-414.
5. Kibler WB. Clinical aspects of muscle injury. *Med Sci Sports Exerc* 1990;22:450-452.

6. Kibler WB, Chandler TJ, Stracener ES. Musculoskeletol adaptations and injuries due to overtraining. *Exerc Sport Sci Rev* 1992;20:99-126.
7. Herring SA. Rehabilitation of muscle injuries. *Med Sci Sports Exerc* 1990;22:453-456.
8. Medoff RJ. Soft tissue healing. *Ann Sports Med* 1987;3(2):67-70.
9. Burry HC. Soft tissue injury in sport. *Exerc Sport Sci Rev* 1975;3:275-301.
10. Carlson BM, Foulkner JA. The regeneration of skeletal muscle fibers following injury: a review. *Med Sci Sports Exerc* 1983;15:187-198.
11. Kellett J. Acute soft tissue injuries - a review of the literature. *Med Sci Sports Exerc* 1986;18:489-500.
12. Jorvinen MJ, Lehto MUK. The effects of early mobilization and immobilization on the healing process following muscle injuries. *Sports Med* 1993;15:78-89.
13. Leadbetter WB. Cell-matrix response in tendon injury. *Clin Sports Med* 1992;11:533-578.
14. Tidball JG. Inflammatory cell response to acute muscle injury. *Med Sci Sports Exerc* 1995;27:1022-1032.
15. Byl NN, McKenzie AL, West JM, Whitney JD, Hunt TK, Scheuenstuhl HA. Low-dose ultrasound effects on wound healing: a controlled study with Yucatan pigs. *Arch Phys Med Rehobil* 1992;73:656-664.
16. Jackson BA, Schwane JA, Starcher BC. Effect of ultrasound therapy on the repair of Achilles tendon injuries in rats. *Med Sci Sports Exerc* 1991;23:171 - 176.
17. Tipton CM, Matthes RD, Moynord JA, Carey RA. The influence of physical activity on ligaments and tendons. *Med Sci Sports* 1975;7:165-175.
18. Burroughs P, Dahners LE. The effect of enforced exercise on the healing of ligoment injuries. *Am J Sports Med* 1990;18:376-378.
19. Fronk C, Woo SL-Y, Amiel D, Harwood F, Gomez M, Akeson W. Medial collateral ligament healing: o multidisciplinary assessment in rabbits. *Am J Sports Med* 1983;11:379-389.
20. Beckmon SM, Buchanan TS. Ankle inversion injury ond hypermobility: effect on hip and ankle muscle electromyography onset latency. *Arch Phys Med Rehobil* 1995;76:1138-1143.
21. Nicholas JA, Strizak AM, Veras G. A study of thigh muscle weakness in different pothological states of the lower extremity. *Am J Sports Med* 1976;4:241 -248.
22. Appell H-J. Muscular atrophy following immobilization: a review. *Sports Med* 1990;10:42-58.
23. Miles MP, Clarkson PM, Bean M, Ambach K, Muiroy J, Vincent K. Muscle function at the wrist following 9 d of immobilization and suspension. *Med Sci Sports Exerc* 1994;26:615-623.
24. Mueller EA. Influence of training and of inoctivity on muscle strength. *Arch Phys Med Rehobil* 1970;51;449-462.
25. Booth FW, Gollnick PD. Effects of disuse on the structure and function of skeletal muscle. *Med Sci Sports Exerc* 1983;15:415-420.
26. Soltin B, Blomqvist G, Mitchell JH, Johnson RL, Wildenthal K, Chapman CB. Response to exercise after bed rest and after training: o longitudinal study of odaptive changes in oxygen transport and body composition. *Circulotion* 1968;38:VII-1-VII-67.
27. Booth FW, Gould EW. Effects of training and disuse on connective tissue. *Exerc Sport Sci Rev* 1975;3:83-112.
28. Deitrick JE, Whedon GD, Shorr E. Effects of immobilization upon vorious metabolic and physiological functions of normal men. *Am J Med* 1948;4:3-36.
29. Greenleaf JE, Koziowski S. Physiologicol consequences of reduced physical activity during bed rest. *Sport Sci Rev* 1992;84-119.
30. Gamble JG, Edwords CC, Max SR. Enzymatic adaptations in ligaments during immobilization. *Am J Sports Med* 1984;12:221-228.
31. Noyes FR. Functional properties of knee ligaments and alterations induced by immobilization: a correlative biomechanical and histologicol study in primates. *Clin Orthop Relot Res* 1977;123:210-242.
32. Noyes FR, Torvik PJ, Hyde WB, DeLucas JL. Biomechanics of ligament failure II. on anolysis of immobilization, exercise, and reconditioning effects in primates. *J Bone Joint Surg* 1974;56-A:1406-1418.
33. Enneking WF, Horowik M. The intra-articular effects of immobilization on the human knee. *J Bone Joint Surg* 1972;54-A:973-985.
34. Finsterbush A, Friedman B. Reversibility of joint changes produced by immobilization in rabbits. *Clin Orthop Relot Res* 1975;111:290-298.
35. Woo SL-Y, Matthews JV, Akeson WH, Amiel D, Convery FR. Connective tissue response to immobility: correlotive study of biomechonical and biochemical measurements of normol ond immobilized rabbit knees. *Arthr Rheum* 1975;18:257-264.
36. Troyer H. The effect of short-term immobilization on the rabbit knee joint cortilage: a histochemical study. *Clin Orthop Relot Res* 1975;107:249-257.
37. Rutherford OM. Muscular coordination and strength troining: implications for injury rehabilitation. *Sports Med* 1988;5:196-202.
38. Sale DG. Neural odoptation in strength and power training. In: Jones NL, McCartney N, McComas AJ, editors. Human Muscle Power. Champaign: Illinois, Human Kinetics, 1986:289-307.
39. Barrack RL, Skinner HB, Buckley SL. Proprioception in the anterior cruciote deficient knee. *Am J Sports Med* 1989;17:1-6.
40. Gorn SN, Newton RA. Kinesthetic awareness in subjects with multiple ankle sprains. *Phys Theropy* 1988;68: 1667-1671.
41. Fisher AC. Adherence to sports rehabilitotion programmes. *Sports Med* 1990;9:151-158.
42. Spencer JD, Hoyes KC, Alexander IJ. Knee joint effusion and quodriceps reflex inhibition in man. *Arch Phys Med Rehobil* 1984;65:171-177.
43. Morrissey MC. Reflex inhibition of thigh muscles in knee injury: causes and treatment. *Sports Med* 1989;7:263-276.
44. Hocutt JE, Jaffe R, Rylander CR, Beebe JK. Cryotherapy in onkle sproins. *Am J Sports Med* 1982;10:316-319.

45. Ogilvie-Harris DJ, Gilbart M. Treatment madalities far saft tissue injuries of the ankle: a critical review. *Clin J Sports Med* 1995;5:175-186.
46. Bassett FH, Kirkpatrick JS, Engelhardt DL, Malone TR. Cryatherapy-induced nerve injury. Am J *Sports Med* 1992;20:516-518.
47. Wilkerson GB. External compression far cantralling traumatic edema. *Physician Sportsmed* 1985;13(6):97-106.
48. Rucinski TJ, Hoaker DN, Prentice WE, Shields EW Jr, Cate-Murray DJ. The effects af intermittent campressian an edema in postacute ankle sprains. *J Orthap Sparts Phys Ther* 1991;14(2):65-69.
49. Grant AK. Massage with ice (cryokinetics) in the treatment af painful conditions of the musculaskeletal system. *Arch Phys Med Rehabil* 1964;45:233-238.
50. Hayden CA. Cryakinetics in an early treatment pragram. *J Am Physical Therapy Assac* 1964;44:990-993.
51. Lake DA. Neuromuscular electrical stimulation: an averview and its applicatian in the treatment af sparts injuries. *Sparts Med* 1991 ;13:320-336.
52. Jensen JE, Etheridge GL, Hazelrigg G. Effectiveness af transcutaneous electrical neural stimulation in the treatment af poin: recommendatians for use in the treatment af sports injuries. *Sports Med* 1986;3:79-88.
53. Smith MJ. Electrical stimulation for relief af musculo-skeletal pain. *Physician Sportsmed* 1983;11:47-55.
54. Almekinders LC. The efficacy af nansteraidal anti-inflammatary drugs in the treatment af ligament injuries. *Sports Med* 1990;9:137-142.
55. McCormack K, Brune K. Taward defining the anolgesic rale of nonsteraidal antiinflammatary drugs in the management of acute saft tissue injuries. *Clin J Sports Med* 1993;3:106-117.
56. Weiler JM. Medical modifiers of sports injury: the use af nonsteroidal anti-inflammatory drugs (NSAIDs) in sparts soft-tissue injury. *Clinics Sparts Med* 1992;11:625-644.
57. Mishra DK, Friden J, Schmitz MC, Lieber RL. Anti-inflammotary medication after muscle injury: o treatment resulting in short-term impravement but subsequent lass af muscle function. *J Bone Joint Surg* 1995;77-A:1510-1519.
58. Almekinders LC. Anti-inflommatary treatment af muscular injuries in sports. *Sports Med* 1993;15:139-145.
59. Taylor DC, Daltan JD, Seaber AV, Garrett WE. Viscaelostic properties of muscletendon units: the biomechanical effects of stretching. *Am J Sports Med* 1990;18:300-309.
60. Anderson B, Burke ER. Scientific, medical, and proctical ospects of stretching. *Clin Sports Med* 1991;10(1):63-86.
61. Sody SP, Wortman M, Blanke D. Flexibility training: ballistic, static or proprioceptive neuromusculor focilitotion? *Arch Phys Med Rehabil* 1982;63:261263.
62. Travell JG, Simons DG. Myofascial pain and dysfunction, Volume 1. Baltimore: Williams and Wilkins, 1983.
63. Noonan TJ, Best TM, Seaber AV, Gorrett WE. Thermal effects on skeletol muscle tensile behovior. *Am J Sports Med* 1993;21:517-522.
64. Strickler T, Malane T, Garrett WE. The effects af passive warming an muscle injury. *Am J Sports Med* 1990;18:141-145.
65. Warren CG, Lehmann JF, Koblanski JN. Elangation af rat tail tendan: effect of laad and temperature. *Arch Phys Med Rehabil* 1971 ;52:465-484.
66. Lehmann JF, Warren CG, Scham SM. Therapeutic heat and cold. *Clin Orthap Relat Resp* 1974;99:207-245.
67. Hoffman MD, Williams CA, Lind AR. Changes in isametric functian following rhythmic exercise. *Eur J Appl Physiol* 1985;54:177-183.
68. Skinner HB, Wyatt MP, Hadgdan JA, Canrad DW, Barrack RL. Effect af fatigue an jaint pasitian sense of the knee. *J Orthop Res* 1986;4:112-118.
69. Bynum EB, Barrack RL, Alexander AH. Open versus closed chain kinetic exercises after anteriar cruciate ligament reconstructian: a prospective randomized study. *Am J Sports Med* 1995;23:401-406.
70. Palmitier RA, An K-N, Scatt SG, Chaa EYS. Kinetic chain exercise in knee rehabilitation. *Sports Med* 1991;11:402-413.
71. Fleck SJ, Falkel JE. Value of resistance training for the reductian of sparts injuries. *Sports Med* 1986;3:61-68.
72. American College of Sports Medicine. The recammended quantity and quality af exercise far develaping and maintaining cardiorespiratory and muscular fitness in healthy adults. *Med Sci Sports Exerc* 1990;22:265-274.
73. Freeman MAR, Dean MRE, Hanham IWF. The etialogy and preventian af functianal instability af the faat. *J Bane Joint Surg* [Br] 1965;47:678-685.
74. Gauffin H, Trapp H, Odenrick P. Effect af ankle disk training on pasturol control in patients with functianal instability af the onkle joint. *In J Sports Med* 1988;9:141144.
75. Tropp H, Ekstrond J, Giliquist J. Factars affecting stabiliometry recordings af single limb stance. *Am J Sports Med* 1984;12:185-188.
76. Tropp H, Ekstrand J, Giliquist J. Stabilametry in functional instability of the ankle and its value in predicting injury. *Med Sci Sparts Exerc* 1984;16:64-66.
77. Barrett DS. Propriaceptian and function after anterior cruciate recanstruction. *J Bone Joint Surg* [Br] 1991 ;73-B:833-837.
78. Kegerreis S, Malone T, McCarroll J. Functional progressions: an oid to othletic rehabilitation. *Physician Sportsmed* 1984;12(12):67-71.
79. Markey KL. Functionol rehabilitation of the cruciate-deficient knee. *Sports Med* 1991;12:407-417.
80. Lysens RJ, de Weerdt W, Nieuwboer A. Factors ossocioted with injury proneness. *Sports Med* 1991;12:281-289.
81. Taimelo S, Kujolo UM, Osterman K. Intrinsic risk foctors ond othletic injuries. *Sports Med* 1990;9:205-215.
82. Tounton JE, McKenzie DC, Clement DB. The role of biomechanics in the epidemiology of injuries. *Sports Med* 1988;6:107-120.

83. Knapik JJ, Janes BH, Bauman CL, Harris JM. Strength, flexibility ond athletic injuries. *Sports Med* 51 1992;14:277-288.
84. Safran MR, Seaber AV, Garrett WE Jr. Warm-up and muscular injury prevention: on updote. *Sports Med* 1989;8:239-249.
85. Karlssan J, Sward L, Andreassan GO. The effect af taping an ankle stobility: proctical implications. *Sports Med* 1993;16:210-215.
86. Montgomery DL, Koziris PL. The knee brace controversy. *Sports Med* 1989;8:260-272.
87. Rarick GL, Bigley G, Karst R, Malina RM. The measurable suppart af the ankle jaint by canventianal methads af taping. *J Bone Joint Surg* 1962;44-A:1183-1190.
88. Myburgh KH, Vaughan CL, Isaacs SK. The effects af onkle guards ond toping an joint motian before, during, and after a squash match. *Am J Sports Med* 1984; 12:441 -446.
89. Surve I, Schwellnus MP, Naokes T, Lombard C. A fivefold reductian in the incidence af recurrent ankle sprains in saccer players using the spart-stirrup arthasis. *Am J Sports Med* 1994;5:601-606.

WISCONSIN MEDICAL JOURNAL

Ongoing Dilemmas: Medical Rehabilitation for Stroke An Overview

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Treatment for the residual effects of stroke is one of the primary activities of Rehabilitation Medicine specialists, accounting for almost one-third of inpatient admissions for rehabilitation.[1] As central as stroke rehabilitation has been to the field of rehabilitation, surprisingly little has been demonstrated regarding the efficacy of stroke rehabilitation or the effects of individual components of a rehabilitation program on long-term outcome.[2,3]

PROBLEMS IN EVALUATING OUTCOMES OF CARE

There are several factors that complicate stroke outcome evaluation. First, the outcome of a successful rehabilitation program depends on more than physical, quantifiable measures such as arm strength and efficiency of ambulation. For example, whether the patient can live independently in a home setting or must be transferred to an institutional environment, whether the patient can take advantage of various vocational opportunities, and the level of satisfaction that patient has in normal family and recreational activities are all important rehabilitation outcomes.

Second, most stroke survivors have a significant degree of spontaneous improvement in function as part of the natural recovery process, making it difficult to distinguish spontaneous improvement from the effects of continual physical training. Third, with the widespread availability of our present comprehensive programs of stroke rehabilitation, ethical considerations prevent the utilization of a non-treatment control to clarify the effects of treatment v. spontaneous recovery.

Current evaluations of stroke outcome, then, are all in the context of formal rehabilitation services. Policies established under the Tax Equity and Fiscal Responsibility Act of 1982 set forth Medicare criteria for acute rehabilitation units. Medicare requires that all inpatients receive a standard of three hours of daily treatment from physical and occupational therapy. The multidisciplinary rehabilitation team also includes speech and language pathology, physician, nursing, psychology, social work, and therapeutic recreation staff. Because rehabilitation hospitals could not ethically offer services of different intensity based on payment source, and because private insurers have largely fallen in line with Medicare guidelines, most stroke survivors receive similar treatment in rehabilitation programs.

Interestingly, this level of care, based on consensus opinion and economic factors, rather than scientific analysis, has become the standard of care.[4] From a practical clinical standpoint, this program intensity can meet the needs of that group of stroke survivors with the highest probability of benefit from treatment. Rehabilitation units must have admission screening criteria to select those individuals who can participate at this level of activity. This group is sometimes called the "middle band" of patients. Patients who have more limiting neurologic deficits, or are medically frail, may be transitioned to an extended care, or "subacute" facility, to receive less daily therapy. Individuals with more minimal neurologic deficits can be managed completely in an ambulatory care setting. All patients in the middle band, however, receive a similar level of rehabilitation service regardless of individual needs.

RETRAINING VS. FUNCTIONAL MODELS OF CARE

Although stroke rehabilitation guidelines are becoming more standardized in this country, there is still some debate as to when a patient should be admitted to a rehabilitation unit, and in the general

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philosophy of treatment. Traditionally, therapy programs have been based in neurodevelopmental theory involving a specified sequence of steps in retraining the nervous system. An alternative focus is a functional model, which seeks to achieve the most rapid return to independent function through any pattern of movement available to a person at a given point in time. The U.S. has moved toward very functional approaches in rehabilitation. There has never been research in rehabilitation to demonstrate that one methodology has more positive effects than another.

THE COPENHAGEN STUDY

The large Copenhagen Stroke Study,[5,6] provides one of our best descriptions of rehabilitation outcome evaluating a large unselected community-based population of stroke survivors in a city of nearly a quarter-million inhabitants. There were 1,197 people admitted for stroke rehabilitation during the latest reported study period. Patients in Denmark remain hospitalized for rehabilitation services from the acute onset of neurologic deficits through a plateau in functional improvement, which was reached at a mean of 37 days. As there is no selection on service delivery related to medical or socioeconomic variables, these reports are able to describe the distribution of functional outcomes as facilitated by therapy services. Seventy-one percent of the patients received therapy services. Acute mortality was 8%; another 5% had an initial low level of consciousness that prevented successful intervention; and 16% of patients had very minimal neurologic deficits requiring no therapeutic intervention. Overall mortality in the hospital was 21%, including those participating in rehabilitation. Deaths were primarily among the most severely involved patients. Discharge to home was achieved in 64% of all stroke patients with the remaining 15% discharged to nursing home care.

Best neurologic recovery was reached quickly in this study, with 80% achieving their best status within 4-1/2 weeks, and 95% in 11 weeks. Regarding functional recovery, best activity of daily living (ADL) function was obtained by 80% in the first 6 weeks, and 95% in 12.5 weeks. Best independence in ambulation was reached by 80% in 3 weeks, and 95% in 11 weeks.

As expected, more severe neurologic deficits were associated with slower recovery and less independence. Among survivors who had initial total leg paralysis, 45% had some return of voluntary strength, and 24% were able to achieve independent ambulation by discharge. Of all survivors, 27% had some independent walking on admission, improving to 64% by discharge. Language impairment and recovery also demonstrated improvement to functional stability fairly quickly; two weeks for mild aphasia, six weeks for moderate impairments, longer for the severely impaired. Even among the most severely affected patients, however, 29% were functioning independently by the completion of rehabilitation. Follow-up at six months post-discharge demonstrated very small additional functional gain, consistent with previous reports that most of the neurologic and functional recovery after a stroke occurs within the first several months.

Outcome data from the multicenter United States Uniform Data System for Medical Rehabilitation (UDS_{MR})[1] is similar to Copenhagen, with the selected middle band of patients admitted to rehabilitation a mean of 17 days after onset, and remaining an additional mean of 25 days. Trends for average lengths of stay continue to decrease by a small degree each year. A total of 76% of stroke rehabilitation admissions were discharged to the community, 15% to extended care, and 5% to an acute care service.

OUTCOME PREDICTION

Previous reports have described predictors of functional outcome after stroke.[3,7,8,9] Stroke severity indicators of severe hemiparesis, coma at onset, and large lesions by brain imaging studies are associated with negative outcome. Additionally, pre-morbid factors of a history of previous strokes and severe cognitive impairments, as well as advanced age, do have some negative impact on recovery. Some functional deficits also are associated with poor outcome including bowel and/or bladder incontinence and neglect syndromes. Overall, people admitted at higher functional levels do recover faster and better. There has been no consistent relationship between functional outcome and gender or side of stroke lesion. There are conflicting reports about the significance of other variables, including aphasia, delayed admission to rehabilitation, and limited social support systems as having negative impact on stroke outcomes.

Predictive models have been developed to combine these multiple variables and hopefully enhance specificity of predictors.[8,9] Such models are limited by a general difficulty in the accuracy of negative predictions after acute neurologic injury. Although individuals with minimal neurologic deficit almost universally do well with rehabilitation, individuals with severe neurologic

impairment show a broad range of levels of independence. Many with severe injuries demonstrate poor recoveries. A few, though, have very good recoveries. It is difficult, in the first weeks after a stroke, to determine which particular survivors will have a more positive outcome. Predictive models offer little additional help in defining outcome over very simple clinical indicators, such as continence.[7]

Some very basic concerns, such as bowel and bladder incontinence, are actually fairly complex functions with many components. Urinary incontinence is influenced by a number of difficulties, including decreased sensory awareness, central inhibition of micturition, and an inability to communicate the need for assistance in toileting. No single CNS lesion is associated with incontinence.[10] The high predictive value of this single function may relate to its large number of component operations, acting as a screen of multiple neurologic systems.

Likewise, the side of hemiparesis and side of CNS lesion is also a complicated variable. Although the side of hemiparesis has not been associated with the outcome alone, several syndromes associate the side of lesion with outcome. For example, severe visual perceptual deficits, especially in association with neglect syndromes, most frequently occur with right hemisphere lesions. Neglect syndromes present a problem in rehabilitation, as the patient has difficulty both understanding his or her own disability, as well as the sensory feedback provided in therapy sessions. Conversely, aphasia is a problem usually associated with left hemispheric lesions. Rehabilitation for patients with aphasia can be complicated by difficulty in communicating instructions to the patient, as well as difficulty in understanding the patient's basic care needs. Rehabilitation outcomes studies[11] have indicated that neglect and aphasia, although both associated with an increased degree of dependency on rehabilitation discharge, do not preclude significant improvements in function through the rehabilitation process. Both neglect and aphasia are associated with a greater magnitude of functional improvement after longer inpatient rehabilitation stays.

Outcome evaluation is further complicated by the degree of spontaneous recovery, which is difficult to distinguish from recovery resulting from therapy. Initial investigators did find improved stroke outcome when services were provided in specialized rehabilitation units as compared to general medical care units with supplemental therapy services.[12,13] Meta-analysis and review studies[2,14] analyzing the effect of increased rehabilitation intensity shortly after a stroke have consistently demonstrated small but statistically significantly intensity-effect relationship.

EFFECTS OF DELAYED REHABILITATION

Finally, rehabilitation outcome studies looking at treatment offered more than six months after stroke onset avoid the period of significant spontaneous recovery and can be done in a truly-controlled fashion. Several studies using this approach have demonstrated responses to therapy treatment late after a stroke.[15,16,17] Werner[16] randomized 49 stroke survivors who were more than one year poststroke to a treatment group receiving four hours of therapy services a week for 12 weeks vs. A non-treatment control group. Significant functional improvements were demonstrated in the treatment group, as verified at a nine-month follow-up check. Sunderland[18] evaluated the use of nontraditional therapy services, including EMG biofeedback, behavioral interventions to enhance compliance, and an intensive educational program focused on improvements in upper extremity function. Although functional independence was not improved through this intervention, many measures of hand and arm dexterity, strength, and other objective tests did improve significantly. A similar eclectic approach, focused on performance feedback and home exercise, has been applied at the Neuro-Muscular Retraining Clinic (NMRC) at the University of Wisconsin. Rodriquez[19] effectively demonstrated gait improvements in 18 hemiplegic subjects receiving gait training more than one year poststroke. The NMRC model is best suited to a person who is very motivated and has the communicative and cognitive skills to understand a relatively complex set of instructions outlining exercises for the various adjustment of body movements.

For the stroke survivor with these abilities, however, this type of program offers a realistic option for some gradual gains in the quality of movement over time, even years after the plateau of spontaneous recovery. Similar chronic programming for aphasia intervention has been described and may be most effective through an intense immersion in the practice of language skills. The stroke survivor in this type of program must understand that the participant is responsible for extensive, long-term practice before significant benefits may be noticed.

CONCLUSIONS

For most patients, the majority of rehabilitation services are provided in the weeks immediately following stroke onset. Outpatient programming may continue for several months after rehabilitation discharge, and even longer in selected case where ongoing improvement in function can demonstrate the need for further professional input. For those individuals with long-term functional impairments after initial rehabilitation, treatment is focused on problem-specific needs ranging from shoulder pain or bracing needs to changes in home care support or driving evaluations. With appropriate follow-up care, it is anticipated that the majority of stroke survivors will be able to maintain long-term independence in function.

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REFERENCES

1. Fiedler RC, Granger CV, Ottenbacher KJ. The Unifarm Doto System for Medical Rehabilitation: Report of First Admissians far 1994. *Am J Phys Med Rehabil* 1996;75:125-129.
2. Ottenbacher KJ, Janell S. The Results of Clinical Trials in Strake Rehabilitatian Research. *Arch Neural* 1993;50:37-44.
3. Jongbloed L. Prediction of Function After Strake: A Critical Review. *Strake* 1986;17:765-776.
4. Jahnston MV, Miller LS. Cost-Effectiveness af the Medicare Three-Haur Regulatian. *Arch Phys Med Rehabil* 1986;67:581-585.
5. Jargensen HS, Nakayama H, Raaschau HO, Vive-Lorsen J, Stoier M, Olsen, TS. Outcome and Time Caurse af Recavery in Strake. Outcame and Time Caurse of Recavery in Strake, Parts I and II. The Capenhogen Strake Study. *Arch Phys Med Rehabil* 1995;76:399-412.
6. Jargensen HS, Nakayama H, Raaschou HO, Olsen, TS. Recovery of Walking Functian in Strake Potients: The Capenhagen Strake Study. *Arch Phys Med Rehabil* 1995;76:27-32.
7. Taub NA, Walfe CDA, Richardson E, Burney PGJ. Predicting the Disobility af First-Time Strake Sufferers at 1 Yeor. *Stroke* 1994;25:352-357.
8. Alexander MP. Stroke Rehabilitation Outcame: A Potentiol Use of Predictive Variables ta Establish Levels af Care. *Strake* 1994;25:128-134.
9. Stineman MG, Maislin G, Fiedler RC, Gronger CV. A Prediction Model for Functional Recavery in Strake. *Strake* 1997;28:550-556.
10. Gelber DA, Good DC, Laven LJ, Verhulst SJ. Causes af Urinory Incantinence After Acute Hemispheric Strake. *Strake* 1993;24:378-382.
11. Ring H, Feder M, Schwartz J, Samuels G. Functianal Measures af First-Stroke Rehabilitation Inpatients: Usefulness of the Functianol Independence Measure Tatal Scare With a Clinical Ratianale. *Arch Phys Med Rehabil* 1997;78:630-635.
12. Indredavik B, Bakke F, Salberg R, Rakseth R, Lund Haaheim L, Halme I. Benefit af o Strake Unit: A Randamized Contralled Trial. *Strake* 1991;22:1026-1031.
13. Kalra L. The Influence af Stroke Unit Rehabilitation an Functianal Recovery Fram Strake. *Stroke* 1994;25:821-825.
14. Kwakkel G, Wagenaor RC, Kaelmon TW, Lankharst GJ, Koetsier JC. Effects af Intensity of Rehobilitotian After Strake. *Stroke* 1997;28:1550-1556.
15. Dam M, Tanin P, Cossan S, Ermani M, Pizzoloto G, Iaia V, Bottistin L. The Effects af Lang-term Rehabilitatian Theropy on Paststrake Hemiplegic Patients. *Strake* 1993;24:1186-1191.
16. Werner RA, Kessler S. Effectiveness af an Intensive Outpatient Rehabilitatian Pragram far Pastacute Stroke Patients. *Am J Phys Med Rehabil* 1996;75:114- 120.
17. Tangeman PT, Banaitis Da, Williams AK. Rehabilitatian of Chranic Strake Patients: Changes in Functianal Perfarmance. *Arch Phys Med Rehabil* 1990;71:876-80.
18. Sunderland A, Tinsan DJ, Bradley EL, Fletcher D, Langtan Hewer R, Wade DT. Enhanced Physical Therapy Impraves Recavery af Arm Functian After Strake. A Randamised Cantrolled Trial. *J Neural Neurasurg Psychiatry* 1992;55:530-535.
19. Radriquez AA, Black PO, Kile KA, Sherman J, Stellberg B, McCarmick J, Raszkawski J, Swiggum E. Gait Training Efficocy Using Home-Bosed Practice Model in Chranic Hemiplegia. *Arch Phys Med Rehabil* 1996;77:801-80.

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Left Ventricular Aneurysm and Peripheral Embolism as Cause of Atypical Foot Pain

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ABSTRACT

Sudden occlusion of a peripheral artery by embolization or acute thrombosis results in acute ischemia. This is most commonly associated with sudden onset of severe pain, numbness and pallor. Chronic ischemia from peripheral vascular disease results in intemmittent claudication. We present a case of peripheral embolization from a left ventricular aneurysm in a previously asymptomatic male who presented to the emergency department complaining of two weeks of pain in his left great toe. Included in the discussion are important diagnostic tests for peripheral thromboembolism and ventricular aneurysm as well as suggestions for emergency department management.

INTRODUCTION

Peripheral ischemia may be chronic or acute. Most patients with chronic ischemia have an insidious onset of pain, characterized by intermittent claudication, and progress to pain at rest only with severe disease. Acute ischemia is characterized by sudden onset of severe pain, numbness and pallor. Physical exam will reveal decreased or absent peripheral pulses especially when compared to the contralateral side. The extremity is either pale and waxy or mottled and non-blanching if the ischemia is advanced. Differentiation of these two syndromes is paramount since the treatment and prognosis vary widely.

Acute ischemia of an organ is caused by an embolism occluding the arterial supply in greater than 80% of cases.[1] The heart is the source of the emboli in 85% to 90% of cases,[2] and most emboli can be traced to atrial fibrillation. Ventricular thrombi are the next most common source and are usually a complication of myocardial infarction (MI).[1]

Left ventricular (LV) thrombi have a known association with acute myocardial infarction, LV aneurysms, and other causes of dilated cardiomyopathy. Thrombi are most commonly diagnosed at the time of an acute MI since close observation and hospitalization are common at this time. Less frequently, thrombi are found associated with dilated cardiomyopathy or in patients greater than eight to 12 weeks following an MI.[3]

We will discuss the unusual presentation of a patient with ischemia secondary to a peripheral thromboembolism from an LV thrombus, his diagnostic work up, and the emergency department management.

CASE REPORT

A previously healthy 40 year-old man presented to the emergency department complaining of left great toe pain for the past week. The pain was greatest when walking or when pressure was applied to the foot. It improved with warm soaks. Past medical history was significant only for cocaine use and IV drug use. He had a negative review of systems.

Physical exam revealed a normal-appearing man in no apparent distress. Vital Signs, T 98.4, BP 170/95, P 80, R 18. The left lower extremity was normal in appearance without obvious signs of trauma, edema or induration. The foot was warm with good distal pulses and normal capillary refill. It was tender to palpation over the first MCP (metacarpophylangeal) joint, and IP (interphylangeal) joint. Range of motion (ROM) of the first toe was limited by pain. The patient was diagnosed with monoarticular arthritis, likely gout, started on indomethacin, and told to follow up in

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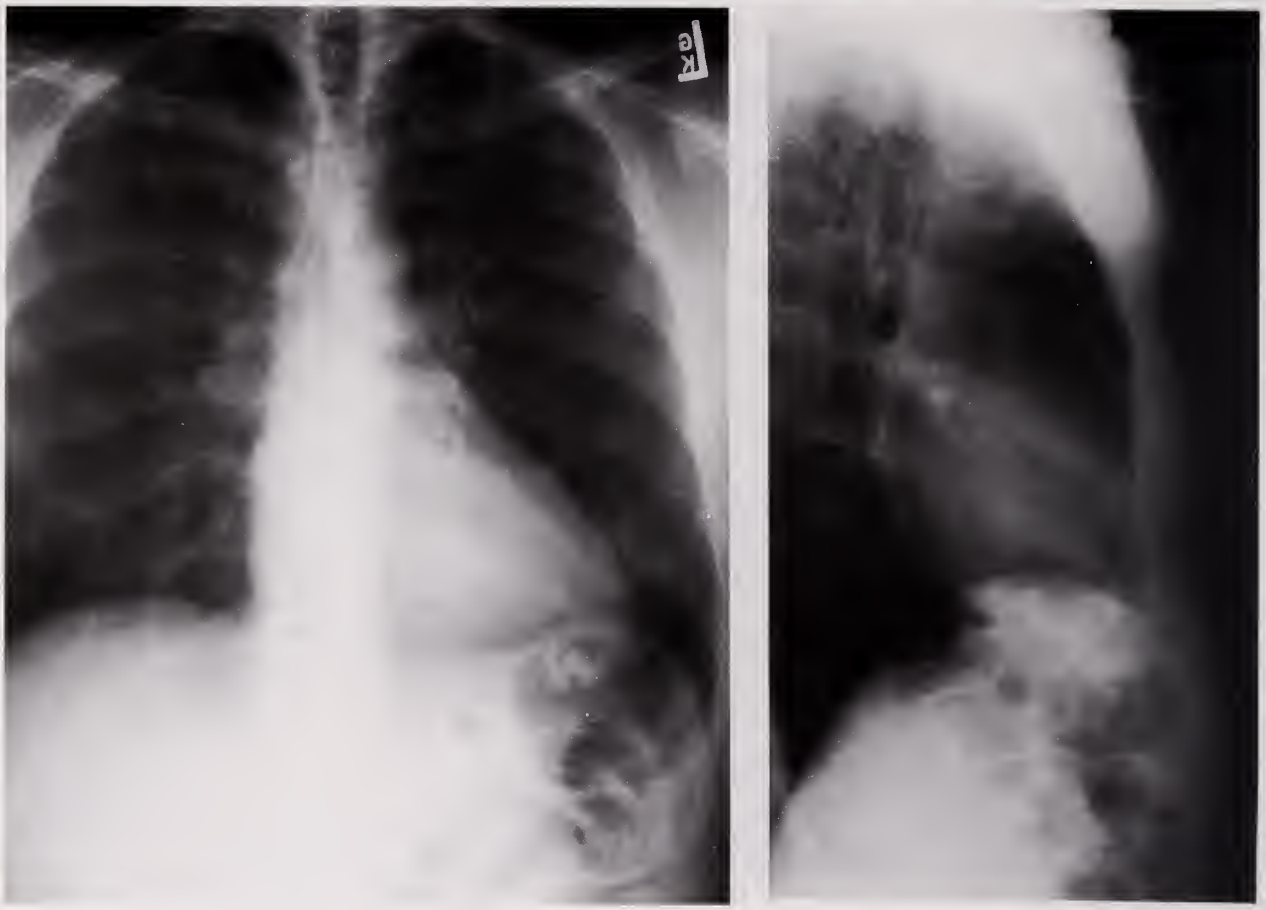

Figure 1. PA and lateral chest X-ray showing subdiaphragmatic calcification.

the urgent care clinic and to have his blood pressure rechecked. He was also advised to return to the ED if his pain worsened or other symptoms developed.

One week later the patient resumed to the ED complaining of persistent foot pain despite therapy. The pain now was worse, involving the base of the great toe as well as the second, third and fourth digit. The pain was constant and achy, aggravated by walking or weight bearing. Additionally, blisters had developed between his toes during his frequent warm soaks.

Repeat exam showed vital signs T 98.0, BP 185/100, P 85, R 18. The left lower extremely appeared normal except for some small areas of skin breakdown between the toes. It was warm to the touch and was without any edema. The first through fourth digits were exquisitely tender to palpation as well as the first MCP joint. Small, superficial bullae were found between the toes. ROM of the toes was limited by pain. Sensation was intact. Capillary refill was normal and dorsalis pedis and posterior tibial pulses were palpable. The rest of the exam remained nominal.

The working diagnoses were monoarticular arthritis and skin breakdown secondary to frequent soaks. As hypertension was documented again on this second visit, a chest X-ray and urinalysis were obtained. The radiograph revealed an area of subdiaphragmatic calcification near the apex of the heart, a finding suggestive of splenic calcification or left ventricular aneurysm (Figure 1). No other abnommalities were noted and the finding was unchanged from a study done one year earlier. The patient was started on nifedipine for his hypertension and colchicine was added for presumptive arthritis. He was advised to decrease the frequency of the warm soaks and to dry the skin between his toes thoroughly afterwards. He was instructed to return to the ED in 48 hours for a recheck of his foot.

In 48 hours the patient resumed to the ED. His pain was much worse, constant, and no longer relieved with oral antiinflammatory medication. On exam, the left foot was pale, cool to touch and neither the dorsalis pedis nor the posterior tibial

pulse were palpable. The leg was cool midway up the calf, a strong popliteal pulse was noted. Capillary refill was not discernible in the distal foot and there was no bleeding to pinprick in the toes. The foot was markedly tender to palpation over the first and second MCP joints and over all five digits. ROM was limited by pain in all digits. There were multiple ulcers between the toes. A pulse was found by Doppler only at the posterior tibial artery. The remainder of the exam remained nominal.

An EKG showed normal sinus rhythm, Q waves in leads 11, III, and aVF, left axis deviation, but no signs of acute ischemia or left ventricular aneurysm. Laboratory studies including basic chemistries, complete blood count, and coagulation studies were entirely normal except for a mildly increased white cell count of 13,500 CCM.

Vascular surgery was consulted and a Doppler duplex scan showed obstruction of the tibial artery. An echocardiogram confirmed the presence of a left ventricular aneurysm with mural thrombus. Peripheral angiography then revealed an abrupt occlusion at the left popliteal artery with reconstitution at the posterior tibial and peroneal arteries. The patient was anticoagulated with heparin and intraarterial urokinase was used to open the obstructed vessel.

DISCUSSION

As this case presentation demonstrates, many of the disease processes diagnosed in the ED vary from the classic presentation. With acute peripheral ischemia, the presenting complaints are usually sudden, severe pain, numbness and pallor. Paritbesias and paralysis may also be present and, if so, indicate more severe disease.[2] The extremity is cool, cyanotic or pale, and pulseless distal to the obstruction. These classic signs and symptoms were absent from the initial presentation of our patient.

The lack of a history of chest pain, arrhythmia, MI, stroke, transient ischemic attack or renal disease placed our patient at low risk for atherosclerotic or embolic disease. In addition, our case was marked with an unusual pain syndrome. The pain was gradual, worsened with pressure or activity and only in its final stages was associated with absent or decreased pulses and pallor. The symptoms may describe a scenario where a partial occlusion was followed by total occlusion.

Acute vascular occlusion is most commonly the result of arterial embolism. The source of the emboli is intracardiac in the majority of cases and is the result of atrial fibrillation, ventricular mural thrombosis, and only rarely from cardiac prosthetic devices, tumors or vegetations.[2]

When LV thrombus is identified as the source, the incidence of peripheral emboli is greatest in patients with dilated cardiomyopathy, occurring in about 19% of cases.[4] It is much lower following an acute MI, about 5%-6% of cases, and even less common in patients with LV aneurysms first diagnosed greater than six months after a MI, developing in only about 1%.[4,5]

However, due to the high incidence of MI, LV thrombus secondary to MI accounts for 60%-70% of peripheral emboli.[4,5] Although our patient had no history of MI, his chest X-ray and EKG are characteristic. The radiographic changes were present for more than a year, implying a remote time course. His risk factors for coronary artery disease include undiagnosed hypertension and tobacco use. He also used cocaine which is associated with myocardial ischemia. The LV aneurysm and thrombus are likely the result of a silent MI, and the outcome was embolization and acute, limb threatening ischemia.

A diagnosis of limb threatening ischemia in the ED requires prompt action. If peripheral vascular occlusion or insuffficiency is suspected a systematic evaluation of the peripheral vascular system is mandatory. The pulse quality at bilateral dorsalis pedis, posterior tibial, popliteal, femoral, radial, brachial, and carotid arteries should be documented. Signs of chronic vascular insufficiency should be looked for and their presence or absence noted.[6] If abnormalities are found, the capillary refill time should be tested and compared to the other side.

Doppler ultrasound testing should be performed on all patients with absent or diminished pulses. An ankle/brachial index may be obtained by dividing the blood pressure found with Doppler at the brachial artery by the pressure obtained at the dorsalis pedis or posterior tibial artery with a thigh cuff.[7] This index will provide an estimate of blood flow to the lower extremely and may be helpful in identifying disease.

If a lesion is identified which is suspicious for an embolic event, a work up directed at identifying a source is indicated. Also, as most patients with peripheral emboli will have some degree of athersclerotic heart disease, this must be addressed prior to a surgical intervention. An EKG, chest X-ray, and echocardiogram should be obtained emergently.

Emergency department management of an ischemic lesion includes prompt diagnosis, timely

surgical consultation and pain management. Acute anticoagulation with heparin is an effective initial therapy and may be started in the ED.[8] Definitive surgical treatment may include thrombectomy, angioplasty, thrombolysis, or bypass grafting.

SUMMARY

Sudden occlusion of a peripheral artery is typically associated with pain, pallor, and pulselessness. Peripheral thromboembolism is most often diagnosed following an acute MI and is rare in patients who do not have coronary artery disease, dilated cardiomyopathy, valvular heart disease, or arrhythmia. This case demonstrates that some embolic events can be associated with atypical pain and can arise in patients without the usual risk factors. Diligence in ED care and follow up can lead to the correct diagnosis and treatment of patients without classic signs or symptoms.

REFERENCES

1. Abbott WM, Moloney RD, McCobe CC, et ol: Arteriol embolism: o 44 yeor prospective. *Am J Surg* 1982; 143:460-464.
2. Brewster DC: How con you best identify ond treot orterial embolism? J *Cardiovasc Med* 1982;7:354-368.
3. Chesebro JH, Ezekowitz M, Bodimon L, et ol: Introcordioc thrombi ond systemic thromboembolism: detection, incidence, ond treotment. *Ann Rev Med* 1985;36:579-605.
4. Lopeyre AC, Steele PM, Kozmier FJ, et al: Low incidence of systemic embolism in left ventriculor oneurysm - o comporison with idiopothic diloted cordiomyopothy (obstroct). *J Am Coll Cardiol* 1983; 1 (2) :704.
5. Adoms PC, Cohen M, Chesebro JH, et ol: Thrombosis ond embolism from cordioc chombers ond infected volves. *J Am Coll Cardiol* 1986;8:76B-87B.
6. Aufderheide TP: Peripherol orteriovosculor diseose, in Rosen P (ed): Emergency medicine: concepts ond clinicol proctice, ed. 3. St Louis, Mosby-Yeor Book, 1992, pp 1418-1451.
7. Wooster DL: Diognostic procedures, in Notes in vasculor surgery. Toronto, St. Josph's HeolthCentre, 1991, p 6.
8. Quinones-Boldrich WJ, Saleh S: Acute orteriol occlusion, in Moore WS (ed): Vosculor Surgery: o comprehensive review, ed. 3. Philodelphio, WB Sounders Co, 1991, pp 578-597.

WISCONSIN MEDICAL JOURNAL

Ureteral Stent Displacement Associated with Deep Massage

by Harry D. Kerr, MD

ABSTRACT

A 51 year-old woman with a history of ureteral stenosis and calculi noted recurrence of severe left flank pain while undergoing a deep body massage using the Rolfing method. Displacement of her left ureteral double J stent was noted in the emergency department. The pain and associated incontinence resolved with restoration of the stent to its original position. Practitioners should be aware of this potential complication related to forceful massage pressures.

Key terms: ureteral stent, massage, rolfing.

INTRODUCTION

With the expansion of contemporary medical and surgical sophistication has come more challenges to the safe application of traditional remedies and treatments. For example, both manual movements of body surfaces and physical exertion have displaced internally placed devices such as pacemaker pulse generators and pacemaker leads.[1,2] This report describes a patient whose ureteral stent was displaced in conjunction with a therapeutic massage.

CASE REPORT

A 51 year-old female underwent placement of a left ureteral double J stent to relieve flank pain associated with a ureteral stricture. For three years the patient had experienced intermittent flank pain due to ureteral calculi and ureteral stricture. She was discharged asymptomatic with the stent in place. Six days later and still free of flank pain she consulted her community therapist, a certified "Rolfer," for a deep body massage using the Rolfing technique. The patient had seen the therapist regularly for deep body massage which she found relaxing and pleasurable. The massage included the patient's abdomen, pelvis, and lower back. Near the end of the session the severe left flank pain returned accompanied by urinary incontinence.

Figure 1. KUB radiograph shows distal positioning of the ureteral stent with the distal tip within the urethra.

Examination in the emergency department was notable for her marked left flank pain and for the visible protrusion of the tip of the stent 1 cm beyond the urethral orifice. She was afebrile and the urinalysis showed no infection. A KUB radiograph was compared to her recent intravenous pyelogram and revealed distal migration of the stent with the proximal end lodging at the lowermost portion of her chronically dilated lower calyceal area (Figure 1). Her pain was relieved with ketorolac 60 mg given intramuscularly and by proximal repositioning of the stent back to its original position.

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DISCUSSION

The temporal relation between the patient's symptoms and the massage suggests strongly that the pressures or tractions generated by the massage resulted in movement of the stent. A specific causative maneuver or position was not identified, however. Stents are used commonly in the treatment of ureteral stricture or obstruction and are part of the treatment of renal and ureteral stones. Ureteral stents may become clogged, encrusted, infected, or may migrate.[3] Stent-related colic may develop and may require treatment with medications.[4] Spontaneous migration of ureteral stents was a particular problem of early stent construction and led to the development of the self-retaining coiled or "double J" design used in many stents today. Direct manual pressure exerted over the suprapubic area has been noted to produce movement of various ureteral stents.[5]

Therapeutic massage has been utilized as a medical treatment since ancient times in diverse cultures and is rendered today mostly by autonomous practitioners with a wide variety of training backgrounds. Massage is usually obtained at the patient's initiative rather than prescribed.[6] Rolfing is a method of forceful deep connective tissue manipulation which may be painful. It is intended to achieve musculoskeletal "structural reintegration" by correcting functional body "misalignment" with the vertical forces of gravity.[7] Rolfing theory holds that misalignment manifests with poor posture, pain, inflexibility, fatigue, and negative psychological attitudes.[7] Pressure and manipulation are used to lengthen and shape fascia in order to release muscle tension. A standard Rolfing series consists of ten sessions each addressing particular body areas.

Although the specific maneuver which initiated the return of the patient's pain could not be defined, posterior pelvic tilting accompanied by pelvic traction and concurrent moderate pressure to the epigastrium has been described and could generate forces sufficient to displace her stent.[8] Similar forceful or painful massage may be associated with traditional Chinese massage but is avoided by practitioners of conventional massage.[9] Contraindications to massage were mentioned in the Hippocratic writings and amplified in modern references.[10-11] They imply that the practitioner of massage must be aware of potential risks to patient safety.

A large variety of internal stents have been introduced in the past decade and are being used to treat and palliate diverse problems involving life-sustaining systems.[12] Research data measuring the effect on internal stent position of various external palpation pressures would be very useful in estimating the degree of risk of migration posed by deep massage or forceful athletic maneuvers.

REFERENCES

1. Mand HG. Permanent cardiac pacemakers. In: Schalant JC, Alexander RW (eds). The Heart, 8th editian. New Yark: McGraw-Hill, Inc;1994:838.
2. Ohm O. Displacement and fracture af pacemaker electrade during physical exertian: repart af three cases. *Acta Med Scand* 1972;192:33-35.
3. Saltzman B. Ureteral stems: indicatians, variatians, and camplicatians. *Ural Clin Narth Am* 1988;15:481-491.
4. Siegel JF, Smith AD. The ideal ureteral stent far antegrade and retragrade endapyelatamy: What wauld it 'De like? *J Endaural* 1993;7:151-154.
5. Pallard SG, MacFarlane R. Symptams arising fram dauble-J ureteral stems. *J Urol* 1988; 139:37-38.
6. Bell AJ. Mechanatherapy, man and machines. *Physiatherapy* 1994;80:61 - 66.
7. Inglis B, West R. The Alternative Health Guide. New Yark: Alfred A Knapf;1983:101-104.
8. Cattingham JT, Parges, SW, Lyan T. Effects af saft tissue mabilizatian (Ralfing pelvic lift) an parasympathetic tane in twa age graups. *Phys Ther* 1988;68:352-356.
9. Palas S. The Chinese Art af Healing. New Yark: Bantam Baaks;1971:154- 165.
10. Hippacrates. On the articulatians. The Theary and Practice af Medicine. New Yark: Philasaphical Library; 1964:211.
11. Kleynhans AM, Terrett AG. The preventian af camplicatians fram spinal manipulative therapy. In: Glasgaw EF, Twamey LT, Scull ER, Kleynhans AM (eds). Aspects af Manipulative Therapy, 2nd editian. Melbaurne: Churchill Livingstane;1985: 161-175.
12. Zallikafer CL, Antanucci F, Stuckmann G, Mattias P, Salamanawitz EK. Histarical averview an the develapment and characteristics af stents and future autlaaks. *Cardiovasc Intervent Radial* 1992; 15:272-278.

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Prevention of Deep Vein Thrombosis and Pulmonary Embolism Following Surgery

by Dale R. Tavris, MD, MPH

Deep Vein Thrombosis (DVT), and Subsequent Pulmonary Embolism (PE), following major surgery, are common and serious problems. A 1988 study showed that almost 1% of hospital admissions in the UK suffered fatal pulmonary embolism as a result of DVT[1].

A 1995 study by the Health Care Financing Administration (HCFA) showed rates of combined DVT and PE, in Medicare patients over the age of 65, following various surgical procedures, ranging from 2.6% to 11.4%, depending on the procedure[2]. The rates for Wisconsin hospitals were significantly higher than the U.S. rates for three of the four procedures for which data is available, as indicated in the table. For the cardiovascular procedures, the Wisconsin rate of DVT and PE was almost twice the rate for the U.S.

Yet, many of these cases could have been prevented with appropriate prophylaxis. A meta-analysis in 1988, of 70 randomized, placebo-controlled studies, using post-surgical low dose heparin to prevent DVT and PE, showed a 66% reduction in DVT and a 50% reduction in PE[3]. Since that time, the use of low molecular weight heparin has been considered to be an even better option for the prevention of DVT and PE. Although studies have generally shown low molecular weight heparin to be more effective (in preventing DVT and PE) and/or less prone to cause bleeding complications than unfractionated heparin[4], these advantages have not yet been conclusively established. But because of its longer half life (three to five hours), low molecular weight heparin can be administered as a single daily subcutaneous injection, thus making it superior to unfractionated heparin in terms of convenience and patient acceptability[5]. Compression stockings or intermittent compression devices have also been shown to be effective in DVT and PE[5].

In summary, Wisconsin exhibited a much higher rate of DVT and PE than the rest of the U.S. following some types of major surgery in 1995, particularly coronary angioplasty (CA) and coronary artery bypass surgery (CABG). If Wisconsin had exhibited the same rates as those shown for the U.S., there would have been 225 fewer cases of post-CABG and post-CA DVT and PE in Wisconsin in 1995. It seems highly likely that attention to post-surgical prophylaxis with low molecular weight heparin

Continued on p. 63 ➤

Dale R. Tavris, MD, MPH, is Epidemiologist at MetaStar and is Assistant Professor of Preventive Medicine at the Medical College of Wisconsin.

Rates of Venous Thrombosis (DVT) And Pulmonary Embolism (PE) Following Selected Inpatient Surgical Procedures On Medicare Patients Over The Age Of 65 - Wisconsin Vs. U.S., 1995

	Wisconsin		United States	
Procedure	# of Procedures Within 1st Two Days	% With DVT or PE	# of Procedures Within 1st Two Days	% With DVT or PE
Coronary Angioplasty	3,367	5.6%	123,638	2.6%
Coronary Artery Bypass	3,359	8.9%	138,174	5.2%
Reductioned at Fractured Femur	2,610	6.9%	114,531	8.3%
Total Knee Replacement	4,383	12.9%	144,244	11.4%
Lung Lobectomy/Pneumonectomy	NA	NA	18,082	9.4%
Partial Excision Large Intestine	NA	NA	73,356	8.8%
Cholecystectomy	NA	NA	35,465	7.8%
Nephrotomy, Pyelotomy, Nephrectomy	NA	NA	16,616	8.7%
Total Hip Replacement	NA	NA	73,682	8.0%
Amputation of Lower Limb	NA	NA	28,484	8.7%

NA = Data not available at this time.

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A New Kind of Do-Not-Resuscitate Order

by Kalisa Barratt, JD, Associate General Counsel

A new law exists in Wisconsin to ensure that the desires of patients who do not wish to be resuscitated at emergency scenes will be honored. It further extends a patient's capability to direct his or her provision of health care services while providing immunity to health care providers who honor those wishes. The following article explains this new law.

The Effect of the Law

It is important to first note that this law is very narrow in scope. It applies only to the withholding of cardiopulmonary resuscitation (CPR) by emergency medical technicians, first responders, and emergency health care facilities' personnel to patients who have a valid DNR bracelet and who have suffered cardiac or respiratory arrest.

Before the creation of this new law, patients who had executed an advanced directive could not be guaranteed that the directive would be followed in a non-institutional, emergency setting. Many times, in emergency situations, family members call ambulances to attend to a victim. Under the old law, emergency responders were required to attempt resuscitation when they were called. This new law mandates that emergency health care personnel who attend to a patient who is pulseless and non-breathing first check the patient's wrist for a DNR band before attempting resuscitation. If a valid bracelet is found, the responder will not undertake life support measures and should only provide comfort care such as administration of oxygen, clearing the airway, controlling bleeding and providing pain medication.

The new law does **not** apply to DNR orders for inpatient hospitalizations or nursing homes or to patients who are not in cardiac or respiratory arrest.

What is Resuscitation?

Resuscitation is defined as "cardiopulmonary resuscitation or any component of cardiopulmonary resuscitation, including cardiac compression, endotracheal intubation and other advanced airway management, artificial ventilation, defibrillation, administration of cardiac resuscitation medications and related procedures." It does not include the Heimlich maneuver or similar procedure used to expel an obstruction from the throat. CPR is the only procedure that is not to be undertaken. All other necessary health care will be administered.

Which Patients are Qualified?

Not all of your patients are eligible for this DNR order. A patient is qualified for a DNR order if he or she is at least 18 and not known by the physician to be pregnant. Plus, any of the following must be true: the patient must have a terminal condition or a medical condition such that, were the patient to suffer cardiac or pulmonary failure, resuscitation would be unsuccessful, would cause significant harm or pain, or would be successful only temporarily. Only an attending physician may issue a DNR order.

Writing and Documenting the Order

A DNR order may be written by the attending physician if the patient meets the above criteria, the patient requests the order, the order is in writing, and the patient signs the order. The types of care to be rendered and withheld should be carefully explained to the patient and family members by the physician or physician designee before the form is signed. After the form is completed, the physician or designee affixes the Do-Not-Resuscitate Bracelet to the patient's wrist and records the decision in the medical record. The Department of Health and Family Services recommends that the written documentation include the rationale for the decision, including qualifying medical condition, and the presence of decision making capacity on the part of the patient.

Both the physician's and the patient's dated signatures are required for this document to be valid and its intent carried out. The patient should be sent home with a copy of the form. An original signed form or a legible

photocopy or electronic facsimile is presumed to be valid. Individuals may reproduce this blank form if they need additional copies.

Revocation

Only the patient can revoke the DNR order. If a member of the patient's family or friend of the patient requests resuscitative measures, the patient's wish not to be resuscitated is controlling. However, the desire of the patient to be resuscitated supersedes the effect of the DNR order. Thus, a patient may choose resuscitation at any time, including at the scene of the emergency.

A patient revokes a DNR order by expressing to emergency health care personnel the desire to be resuscitated, or by defacing, cutting, removing, or asking someone to remove the bracelet. Obviously, the patient must wear the standardized identification bracelet for the order to be valid and honored by emergency health care personnel.

A patient without a bracelet will be presumed to have revoked the DNR order. If the emergency medical technician, first responder or emergency health care facility staff knows the patient is pregnant, the DNR order is invalidated. Likewise, if the bracelet has been tampered with, emergency personnel are not bound by the order.

The attending physician shall be notified as soon as practicable of the patient's revocation of the DNR order and shall record in the patient's medical record the time, date and place of revocation. However, the revocation is effective regardless of physician notification.

Immunities and Penalties

There is civil and criminal immunity for persons or facilities who withhold or withdraw resuscitation from a person with a DNR order. Similarly, unless a person had actual knowledge of a revocation of a DNR order, failing to act upon a revocation is not actionable. Penalties may be imposed for willfully concealing or damaging the DNR bracelet of another or falsifying DNR bracelets or their revocation. Coercing, threatening or intimidating an individual so as to cause the individual to sign or issue a DNR order are also punishable by fines and imprisonment.

Early Problems

This law has been in effect for less than a year. There have been some early clinical problems identified with the DNR bracelets. For example: the bracelets are presently only available in plastic form. Plastic bracelets are contraindicated for persons with thin, frail skin often associated with the elderly. Plus, some patients complain that the bracelets are uncomfortable. The biggest problem associated with the plastic bracelets have been that as the bracelets age, they become brittle. At times it is difficult for emergency responders to distinguish between an aging bracelet and one that has been tampered with. Thus, it is suggested that bracelets are replaced often.

Conclusion

Physicians should discuss the option of obtaining a DNR order and bracelet with their patients where applicable. DNR bracelet inserts and forms are available through the Department of Health and Family Services by calling (608) 267-7147. For more information, please contact Kalisa Barratt, JD, Associate General Counsel at SMS ext. 233 or via e-mail at: KALISAB@smswi.org.

MetaStar Matters — Continued from p. 60

and physical methods would have reduced the rate of post-surgical DVT and PE to close to the U.S. rate, if not below it. Prophylaxis against DVT and PE should be used in all patients following major surgery.

References

1. Sandler, DA Martin JF. Autopsy proven pulmonary embolism in hospital patients: are we detecting vein thrombosis? *Journal of the Royal Society of Medicine* 1989; 82:203-205.
2. Health Care Financing Administrations Medicare Quality of Care Report of Surveillance Measures Introducing the Medicare Quality of Care Surveillance System. 1997.
3. Collins R. Scrimgeour A, Yusef S, Peto R. Reduction in fatal pulmonary embolism and venous thrombosis by perioperative administration of subcutaneous heparin. *New England Journal of Medicine* 1988; 318:1162- 1173.
4. Noble S, Peter DH, Goa KL. Enoxaparin: A Reappraisal of its Pharmacology and Clinical Applications in the Prevention and Treatment of Thromboembolic Disease. *Drugs* 49(3):388-410, 1995.
5. Wheatley T, Veitch PS. Recent Advances in Prophylaxis Against Deep Vein Thrombosis. *British Journal of Anaesthesia* 78:118-120, 1997.

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Basics of Buying Mutual Funds

by Michael J. Dolan, CLU, ChFC

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Professional management means that each fund has one or more portfolio managers who monitor the market, buying and selling securities in order to produce the best possible investment performance.

But there are a number of things to know before you invest in mutual funds.

Dolan is President and Chief Operating Officer of SMS Insurance Services, Inc. and a member of the National Association of Life Underwriters. He can be reached at SMS ext. 550, or via e-mail at: MICHAELD@smswi.org.

- There are over 7,000 mutual funds available today. Some invest in stocks, some in bonds, and some in cash equivalents such as Treasury obligations and certificates of deposit.

Within the stock fund category alone, there are mutual funds concentrating on domestic, international or global investments. There are sector funds, concentrating on specific industries such as health care or technology. There are regional funds. And there are funds designated by objective, ranging from conservative growth-and-income funds to highly aggressive growth funds.

- There are fees associated with mutual fund investing. Funds sold by stockbrokers often have "loads" or commissions which may be imposed when you buy or when you sell. Funds sold by direct mail may have lower loads or none at all. Both types of funds may have "12(b)1" fees, named after the Securities and Exchange Commission ruling that permits these fees. And every fund has management fees.

- Within a "family" of funds, you can often switch from one fund to another without charge. Note, though, that an exchange is a sale for tax purposes. You will have to report your profit or loss.

- Each fund sets a minimum initial investment amount as well as minimum amounts for subsequent investment. Those minimums are usually lower for tax-sheltered plans such as Individual Retirement Accounts. You can also bypass restrictive minimums by signing up for an automatic investment plan and having money shifted from your bank account to the mutual fund on a regular basis.

- There are tax issues to face. As a share owner, you must pay ordinary income tax on dividends, whether you take them in cash or reinvest them, and on capital gains distributions reported by the fund. Keep good records as you go along, especially if you reinvest dividends, so that you can accurately calculate profit or loss when you sell. And remember that you've already paid taxes each year on reinvested dividends; don't pay them again by basing your profit calculations on the simple difference between your initial purchase price and your sales price.

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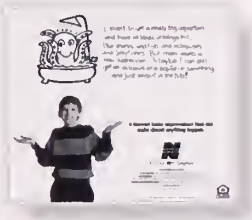

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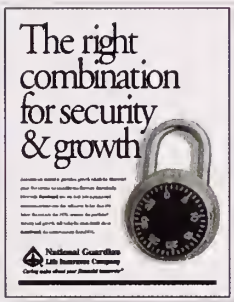

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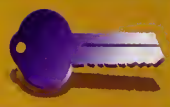

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And now, we're planning to introduce a Members-only page on WISMED, which will provide a value-added site for SMS members, through which you can gain access to legal, policy and Board documents, a membership directory, and much more.

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1997 SMS Annual Report

Created by the Territorial Legislature in 1841 and now representing nearly 8,500 member physicians, the Society's purpose is to "advance the science and art of medicine and the health of the people of Wisconsin; ensure that physicians are equipped to deal effectively with the economic and political aspects of practice; and serve as the patient and physician advocate to government and other relevant publics." The major activities of the Society concern medical education, peer review, legislation, community health education, scientific affairs, socioeconomics, health planning, service to physicians, operation of the Charitable, Educational and Scientific Foundation, and publication of the *Wisconsin Medical Journal.*

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Our cover: Sandra L. Osborn, MD, 1997-1998 SMS President, has outlined a theme of communication for her presidential platform. An area of particular interest for her is how we can use technology to enhance communication.

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SMS 1997-1998 Officers and Directors

SANDRA L. OSBORN, MD

Verona
PRESIDENT
(1997–1998)

Dr Osborn, whose specialty is pediatrics, graduated from the University of Wisconsin Medical School in 1970. She completed an internship and first year of pediatric residency in 1972 at the University of Iowa Hospitals, Iowa City, and finished the residency in 1973 at the University of Wisconsin Hospitals, Madison. She received Board Certification in Pediatrics in 1975. Dr Osborn received her undergraduate degree in education from Iowa State Teachers College (UNI), Cedar Falls, in 1958; and a Master of Science degree from the UW Madison, in mathematics, in 1960.

Dr Osborn, who lives in Verona, has practiced with the East Madison Clinic/Dean Clinic, since 1973, and became a partner in 1975. She has been an active staff member of St. Marys Hospital Medical Center, Madison, since 1973, and has also been a courtesy staff member and Associate Clinical Professor with the University of Wisconsin Hospitals since 1973. She has served as a Board Attendee of the Physician Practice Association, Dean Clinic, since 1994.

Dr Osborn was a member of the SMS Board of Directors representing District 2 from 1987 to 1993, and was Speaker of the House of Delegates from 1993-1996. She became the SMS President Elect in 1996. She is a member of the WISPAC Board of Directors and co-chair of the SMS/WNA Commission. Other SMS committees she has served on include: House of Delegates Nominating Committee 1980-1987 (Chair 1981-1982), 1989-1993; the Credentials Committee (member and Chair); and the House of Delegates Reference Committee on Scientific Activities (1984, 1988, 1989-Chair, 1990-Chair, 1991-Chair); the SMS Strategic Planning Committee, 1994; and the SMS EVP Search Committee. Dr Osborn also served on the Ad Hoc Committee on Child Abuse and Neglect; the SMS Committee on Women Physicians; and the WNA/WHA Task Force on Unlicensed Assistive Nursing Personnel.

Dr Osborn served as president of the Dane County Medical Society from 1982 to 1983; she served as an SMS delegate for Dane County from 1978-1993. She served on the DILHR Council on Child Labor Laws from 1992-1996; the Rural Development Council Ad Hoc Work Committee on Medicare Physician Payment Districts, 1994-1997; PIC Wisconsin Board member and member of the Underwriting Committee, 1996-present; and she has attended several press conferences as a spokesperson for the SMS on issues such as tobacco legislation and Healthy Start.

Dr Osborn is active in several community organizations including: former Children's Service Society Board member; attending physician for high school, WIAA, and Badger State Athletic Events; University of Wisconsin Medical Alumni Association Board member, 1994-present; Pediatric Consultant with Playful Kids Learning Center Day Care facility, 1996-present; and her local church choir.

Dr Osborn and her husband, Marshall Finner, have four children: Catherine Kangas, who lives in the Twin Cities with her husband and two sons; Douglas Osborn, who lives in Middleton with his wife and two sons; Sherri Kardong, who lives in Long Beach, Calif with her husband; and Sue Cochard who lives with her husband in Evanston, Ill. Dr Osborn is an active runner/jogger, who likes to compete in a variety of road races at both the local and national levels, including: the Boston Marathon, the Twin Cities Marathon, the Stoughton Syttende Mai, the Grandma's Marathon, and a variety of shorter-distance runs. Additionally, she enjoys playing the recorder as a soloist and with friends.

JOHN D. RIESCH, MD

Menomonee Falls
PRESIDENT-ELECT
(1997–1998)

John D. Riesch, MD, is a general surgeon with the Medical Associates Health Centers in Menomonee Falls. He received his medical degree from the University of Wisconsin Medical School in 1958; completed an internship with the Milwaukee County General Hospital; and a general surgery residency there in 1963. He served in the US Army from 1952-1954 and in 1965 was appointed Assistant Clinical Professor, Department of Surgery, with the Medical College of Wisconsin, a post he still holds. He is board certified in surgery and is a fellow with the American College of Surgeons.

Doctor Riesch has been a member of the SMS since 1963 and has held the following posts: member, Nominating Committee, 1976-1994; member, Commission on Peer Review, 1975-1984; Delegate, House of Delegates 1967-present. He served as an AMA Alternate Delegate from 1979-1988 and a Delegate from 1988-1996.

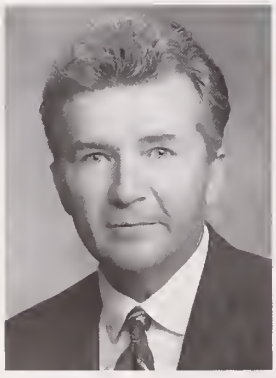
RICHARD H. ULMER, MD

Marshfield
IMMEDIATE PAST PRESIDENT
(1997–1998)

Richard H. Ulmer, MD, SMS President in 1996-1997, is a board-certified internist, and a retired cardiologist with Marshfield Clinic where he practiced from 1969-1996.

Dr Ulmer graduated from Stritch School of Medicine of Loyola University in Chicago, Ill, in 1961; he completed his internship at the University of Chicago Hospitals, followed by a residency in internal medicine and then a fellowship in cardiology at the same institution.

Dr Ulmer is a member of the American College of Physicians, the American Heart Association and its Council on Clinical Cardiology, and the American Medical Association. He has served as a delegate to the SMS House of Delegates since 1974 and a member of the SMS Board of Directors since 1986. He was elected vice chair in 1987 and 1988, and chairman of the SMS Board of Directors in 1989, a position he held for six years. Dr Ulmer has been a member of the Wisconsin AMA delegation since 1983, first as an alternate delegate and then a delegate in 1995.



JOHN E. PATCHETT, JD

Madison
EXECUTIVE VICE PRESIDENT
(1997–1998)

Before joining the SMS in October, 1996, John Patchett, JD, served as Deputy Executive Vice President of the Florida Medical Association. Prior to that, he spent 10 years on the staff of the American Medical Association -- four years in Specialty Society Relations and six years as Director of the Department of State Legislation. He served in the Iowa House of Representatives from 1973 to 1980. Mr Patchett earned his Juris Doctorate degree at the University of Iowa School of Law.

JACK M. LOCKHART, MD

La Crosse
TREASURER
DIRECTOR, DISTRICT 3
(1995–1998)

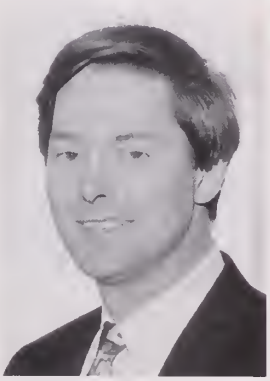
Jack M. Lockhart, MD, of La Crosse, is Board certified in internal medicine and rheumatology. Dr Lockhart graduated from Harvard Medical School and served an internship at University Hospitals of Cleveland, Cleveland, Ohio. He completed fellowships at the University of Minnesota Medical School in Minneapolis where he was an instructor from 1976-1977, and has been a clinical lecturer with the University of Iowa since 1982.

Dr Lockhart served as a delegate to the SMS and has been on the Board of Directors since 1989, serving on the Finance Committee since that time, and was a member of the Nominating Committee from 1986-1990. He has served as a member of WISPAC's Board of Directors since 1990, and was a member of the Physicians Alliance Commission for nine years. Dr Lockhart served as the President of the La Crosse County Medical Society (1993-1994). In addition, he has held numerous leadership positions with Gundersen Clinic/Lutheran Hospital, La Crosse.

MICHAEL C. REINECK, MD

West Bend
SPEAKER
(1997–1999)

Dr Reineck graduated from the University of Wisconsin in 1970 and completed an internship at Milwaukee County General Hospital and a residency at St Mary's Hospital, in affiliation with the Medical School of the University of Michigan, in Grand Rapids. He is in private practice at Orthopaedic Associates of West Bend, SC. Dr Reineck is past chair of the Governmental Affairs Commission, and past president of the Wisconsin Orthopaedic Society and the Washington County Medical Society. He is also a past member of the Wisconsin Professional Liability Committee. He is a member of the American Academy of Orthopaedic Surgeons Committee on CPT and ICD Coding and Bylaws Committee. He was the Washington County Medical Society delegate to the SMS House of Delegates for 11 years prior to his election as vice speaker in 1994.



KEVIN T. FLAHERTY, MD

Wausau
VICE SPEAKER
(1996–1998)

Dr Flaherty received his medical degree from Loyola University in Chicago. He served an internship at Sacred Heart Medical Center in Spokane, Wash, and his residency at Loyola University in ophthalmology. He took post residency training in corneal transplant surgery at the University of Louisville in Louisville, Ky, and in ophthalmic plastic and reconstruction surgery at the Massachusetts Eye and Ear Infirmary at Boston, Mass. He has been in practice in Wausau for seven years. For the past three years, Dr Flaherty has served as medical director for the North Central Health Protection Plan, a cooperative health plan of Wausau Insurance. He is currently president of the Wisconsin Academy of Ophthalmology and serves on its executive committee. Dr Flaherty has served as the Marathon County Medical Society delegate to the SMS House of Delegates. He has chaired reference committees at the Young Physicians Section of the AMA and SMS. In 1995, Dr Flaherty was elected as an alternate delegate to the Wisconsin delegation of the AMA.

RAYMOND C. ZASTROW, MD

Milwaukee
CHAIR, BOARD OF DIRECTORS
DIRECTOR, DISTRICT 1
(1995–1998)

Dr Zastrow, who specializes in clinical pathology, graduated from Marquette University School of Medicine (now the Medical College of Wisconsin). He served on the SMS Physicians Alliance Commission from 1977 to 1989, and was a member of the WISPAC Board of Directors. He served as chair of the SMS Bylaws Committee, was a member of the Finance Committee and was an alternate delegate to the AMA from 1983 to 1984. Dr Zastrow has also served on the AMA Ad Hoc committee on the Health Policy Agenda for the American People (HPA). He has served on the SMS Board of Directors since 1990, and was vice-chair from 1991-1996.

MARK H. ANDREW, MD

Viroqua
VICE CHAIR, BOARD OF DIRECTORS
DIRECTOR, DISTRICT 3
(1995–1998)

Dr Andrew, a general surgeon, graduated from the University of Wisconsin Medical School, and served his internship and residency at Southwestern Michigan Area Health Education Center in Kalamazoo. He was chair of the Young Physicians Section of SMS in 1991. He is a member of the SMS Commission on Governmental Affairs, the SMS Ad Hoc Membership Committee, the SMS Nominating Committee, and is president of the Vernon County Medical Society.

ROBERT F. PURTELL, JR., MD

Milwaukee
DIRECTOR, DISTRICT 1
(1995–1998)

Dr Purtell has been a member of the SMS Board of Directors and its Executive Committee since 1989. He was chair of the SMS Federal Legislative Policy Committee from 1977-1985, a member of the Commission on Governmental Affairs from 1978-1985, was the delegate to the House of Delegates, Family Practice Section, and chair of the Physicians Alliance Commission from 1985-1989. Dr Purtell served on the Reference Committee on National Issues at the House of Delegates in 1980-1982, has been a member of the Nominating Committee since 1986, serving as chair in 1989-1990. He served as president of the Medical Society of Milwaukee County in 1992-1993, and has served as an alternate delegate to the AMA since 1990. He was president and chair of the board of directors of PrimeCare Health Plan of Wisconsin from 1982 through 1986. Dr Purtell graduated from Marquette University in 1961, and served his internship at Misericordia Hospital in Milwaukee, and his residency at St Joseph's Hospital in Milwaukee.

CASSANDRA P. WELCH, MD

Milwaukee
DIRECTOR, DISTRICT 1
(1995–1998)

Dr Welch is an internist and the medical director of Milwaukee Health Services, Inc. She graduated from the Medical College of Wisconsin and completed her residency at Long Beach Veterans Administration Medical Center in Long Beach, Calif. She is a member of the Medical Society of Milwaukee County's (MSMC) Professional Education Committee, where she serves as vice chair. Previously, she was a member of the MSMC Ethics Committee. In addition to MSMC, she is presently serving on the State Program Advisory Committee for the Wisconsin Area Health Education Center; the Milwaukee Area Health Education Center as Board vice president; the Governor's Council on African American Affairs; and Region V Clinician's Network, as president.

CLARENCE P. CHOU, MD

Mequon
DIRECTOR, DISTRICT 1
(1996–1999)

Dr Chou received his medical degree from the Medical College of Wisconsin. He completed his internship, residency, and a fellowship in child psychiatry at Medical College of Wisconsin Affiliated Hospitals. He practices at the Child-Adolescent Treatment Center in Wauwatosa. He serves as a consultant to Southeastern Wisconsin Medical and Social Services, Inc, and is a consultant to the Children's Service Society in Milwaukee. Dr Chou is an assistant clinical professor at the Medical College of Wisconsin, and an examiner for the Child Psychiatry Boards. He is chair of the Public Education Committee of the Medical Society of Milwaukee County, as well as a member of the Task Force on Managed Care and the Strategic Planning Committee. He is Vice Chair of the SMS Commission on Public Information, and a member of the American Academy of Child and Adolescent Psychiatry, American Psychiatric Association, and the Wisconsin Psychiatric Association.

GERALD G. GOVIN, MD

Brookfield
DIRECTOR, DISTRICT 1
(1996–1999)

Dr Govin, a specialist in plastic, reconstructive and hand surgery, graduated from the Medical College of Wisconsin in 1973. He completed his internship and residency programs in general surgery at the Navy Regional Medical Center in San Diego, CA. He served as an instructor for the general surgery and family practice residents of the University of California and Navy programs. At NRMC, Camp Pendleton, he served as chair of several committees and was the director of critical care for the medical center. As a staff surgeon in the Navy with special expertise in trauma and critical care, he served in South East Asia, the Middle East, Alaska, and the Pacific. In 1981, he resigned his commission as Commander, USN, in order to take a residency in plastic surgery, which he completed at the Medical College of Wisconsin in 1983. He is a diplomate of both the American Board of Surgery and the American Board of Plastic Surgery. Dr Govin has served as a member of the Ethics, Emergency Care and Public Education Committees for the Medical Society of Milwaukee County, and has been a delegate to the SMS since 1986.

Charles E. Holmburg, MD

Menomonee Falls
Director, District 1
(1996–1999)

Dr Holmburg received his medical degree from the University of Wisconsin Medical School in 1966, and completed a residency in internal medicine at Milwaukee County General Hospital in 1972. He has been affiliated with the Medical College of Wisconsin as an assistant clinical professor since 1979. He has also been active in the American College of Physicians Mentor Program as a teacher, since 1992. Dr Holmburg has been an active member of numerous medical organizations, including the American College of Physicians, Wisconsin Society of Internal Medicine (board member), American Society of Internal Medicine, and Waukesha County Medical Society, serving as president in 1992. He has been a delegate to the State Medical Society of Wisconsin and served on the Commission on Continuing Medical Education. In addition to practicing internal medicine, Dr Holmburg was director of clinical research at Medical Associates, a group that performed clinical research for premarketing of new pharmaceuticals.

David J. Matteucci, MD

Kenosha
Director, District 1
(1996–1999)

Dr Matteucci received his medical degree at Creighton University School of Medicine, Omaha, Neb, in 1974. He went on to complete his residency in general surgery at Creighton University Affiliated Hospitals, and a fellowship in colon/rectal surgery with the Cleveland Clinic Foundation. He is a fellow, American Society of Colon/Rectal Surgeons and American College of Surgeons; was a founding member of the Society of American Gastrointestinal Endoscopic Surgeons in 1980; member of the Midwest Society of Colon/Rectal Surgeons and Wisconsin College of Surgeons. He was a member of the Kenosha County Medical Society Board of Directors from 1986-1989, and was president in 1988. He has been a member of numerous committees covering a wide variety of medical topics. Additionally, Dr Matteucci has held several instructorship and professorship positions since 1977, and currently serves as assistant clinical professor, Department of Surgery, Medical College of Wisconsin.

Timothy G. McAvoy, MD

Waukesha
Director, District 1
(1996–1999)

Dr McAvoy graduated from New York Medical College, New York, NY. Specializing in internal medicine and emergency medicine, Dr McAvoy served his internship at Boston City Hospital. His residency was completed at Boston City Hospital and the University of Wisconsin Hospital and Clinics in Madison. He served as president of the Waukesha County Medical Society and was a member of the Physicians Alliance Commission. He is an SMS Alternate Delegate to the AMA.

MARVIN G. PARKER, MD

Racine
DIRECTOR, DISTRICT 1
(1996–1999)

An internist, Dr Parker received his medical degree from the University of Missouri in St Louis, and served his residency and fellowship in internal medicine and hematology at the University of Missouri. Dr Parker began practice in Racine in 1966. In 1986, he joined SC Johnson Wax as corporate director of occupational and preventive medicine and in 1990, became vice president of Corporate Medical Affairs. He chaired the SMS Health Planning Commission for five years and also chaired the SMS Task Force on Medical Manpower.

GEORGE R. SCHNEIDER, MD

West Allis
DIRECTOR, DISTRICT 1
(1997–2000)

A specialist in internal medicine, Dr Schneider graduated from Marquette University School of Medicine (now the Medical College of Wisconsin) in Milwaukee and served an internship at the University of Missouri Medical Center in Columbia. He also completed a residency at the Medical College. He is in solo practice of internal medicine and was recently appointed medical director of the Greater Milwaukee Free Clinic in West Allis.

FRANK H. URBAN, MD

Brookfield
DIRECTOR, DISTRICT 1
(1997–2000)

Dr Urban, a retired physician, is currently the State Representative for the 99th Assembly District. He received his medical degree from the University of Wisconsin-Madison, and an MS from the University of Minnesota. Dr Urban is the past president of the Milwaukee County Medical Society, an assistant clinical professor at the Medical College of Wisconsin, and is a member and past president of the Wisconsin Dermatology Society. Legislative appointments include vice chair of the Assembly Committee on Health, chair of the Subcommittee on Nursing Homes, chair of Urban and Local Affairs, and a member of Consumer Affairs and Urban Education.

BRADLEY L. MANNING, MD

Madison
DIRECTOR, DISTRICT 2
(1995–1998)

Dr Manning, whose specialty is plastic and reconstructive surgery, graduated from the University of Illinois College of Medicine and completed his general surgery and plastic surgery residency at the University of Wisconsin-Madison. He has served as a trustee and president of the Dane County Medical Society. He was chair of the department of surgery and vice-president of medical staff at Meriter Hospital. Dr Manning served on the SMS Task Force on Health Care Reform and on the Commission on Public Information. He has served as a delegate for the SMS and is currently a director and member of the Health Care Financing and Delivery Commission.

JOHN W. BEASLEY, MD

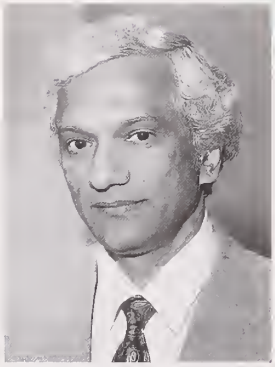
Madison
DIRECTOR, DISTRICT 2
(1996–1999)

Dr Beasley graduated *cum laude* from Harvard College in 1964 and received his medical degree from the University of Minnesota in 1969. Following a Peace Corps appointment overseas, Dr Beasley completed his family practice residency at the University of Wisconsin-Madison. He is associate professor of family medicine at UW-Madison, and the founder and director of the Wisconsin Research Network (WReN). Dr Beasley was co-originator of the Advanced Life Support in Obstetrics (ALSO) course, and headed the task force that developed the first nationally-used examination in family medicine for medical students. Dr Beasley is a past-president of the Wisconsin Academy of Family Physicians, served as president of the Wisconsin Institute of Family Medicine, and the Dane County Medical Society. His work with the SMS includes service on the Task Force on Rural Health Care, the Task Force on Health Care Reform, and as a member of the Commission on Continuing Medical Education. He maintains an active practice in Verona, Wis.

JERRY M. INGALLS, MD

Monroe
DIRECTOR, DISTRICT 2
(1997–2000)

Dr Ingalls graduated from Duke University, Durham, North Carolina, and completed his internship and residency at Duke University and the University of Oklahoma. A past president of the Illinois State Medical Society (1975), he presently serves as chair of the Medical Quality Research Council. He is also the president of the Monroe Medical Foundation for Research and Education.



AYAZ M. SAMADANI, MD

Beaver Dam
DIRECTOR, DISTRICT 2
(1997–2000)

A family physician, Dr Samadani received his medical degree in Pakistan. He served his internship at Henrotin Hospitals in Chicago. He spent 5 years of post graduate training in internal medicine and pediatrics in London. He is a fellow of the Royal Society of Tropical Medicine and Hygiene and certified in child health from the Royal College of Physicians and Surgeons of London. He has been in practice in Beaver Dam since 1971, and is chair of the pediatric department of Beaver Dam Community Hospital. He has served as secretary and president of Dodge County Medical Society and is past president of the Wisconsin chapter of the Association of Pakistani Physicians of North America. He is a member of the SMS Medical Outcomes Research Project. Dr Samadani is a member of the AMA Advisory Committee of International Medical Graduates, and a fellow of the American Academy of Family Physicians.

Alan I. Schwartzstein, MD

Oregon
Director, District 2
(1997–2000)

A family practitioner with Dean Medical Center-Oregon Clinic, Dr Schwartzstein has been a member of the SMS since 1987. He received his medical degree from Rutgers Medical School (Robert Wood Johnson Medical School) and completed a family practice residency at Brown University, Memorial Hospital. Dr Schwartzstein serves on the Budget & Finance Committee of the Dean Medical Center, is a member of the American Academy of Family Physicians, the American Medical Association, and the Dane County Medical Society, where he currently serves as vice president. Dr Schwartzstein also serves as a member of the SMS Task Force on Governance Structure.

Paul A. Wertsch, MD

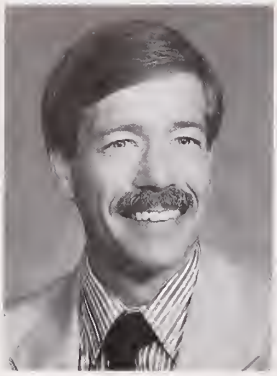
Madison
Director, District 2
(1997–2000)

Dr Wertsch graduated from the University of Wisconsin Medical School in 1970. He completed a rotating internship at St Paul Ramsey Hospital and a family practice residency at USPHS Indian Hospital in Gallup, NM. He was a co-founder of the Wildwood Family Clinic, where he has been practicing since 1978. Dr Wertsch was chair of the Department of Family Practice, St Mary's Hospital Medical Center, from 1983-1986, and chief of staff at St Mary's from 1988-1990. He was an alternate delegate to the SMS from 1986-1989, and a delegate from 1989 to the present. Committee experience includes credentials, pharmacy and therapeutics, utilization, bio-ethics, integrated quality assurance, bylaws, medical records, and executive.

James R. Keuer, MD

Minocqua
Director, District 4
(1995–1998)

Dr Keuer graduated from the Chicago Medical School in 1954. He completed his internship at Milwaukee County General Hospital, and his residency in general surgery at the Veterans Administration Center, Wood, Wisconsin. He served in the US Navy for two years prior to opening his practice in general surgery in Medford. He also practiced in Minocqua. Since 1993, he has been working in the Department of Urgent Care at Marshfield Clinic, Lakeland Center in Minocqua.



ROBERT E. PHILLIPS, MD

Marshfield
DIRECTOR, DISTRICT 4
(1995–1998)

Dr Phillips, a general internist and geriatrician, received his medical degree from Northwestern University Medical School in Chicago, and served his residency in internal medicine at the University of Minnesota Affiliate Hospitals. Dr Phillips has been in practice at the Marshfield Clinic since 1979. An SMS member since 1979, he has served on the Commission on Mediation and Peer Review, Commission on Geriatric Health, and is currently Chair of the Commission on Public Information. Dr Phillips was the ad hoc chair of the State Mini-Internship Committee and has been a delegate to the SMS since 1988. He is also a past president of the Wood County Medical Society, a member of the nominating committee of the SMS from 1990-1995, (chair 1992-1993). Dr Phillips served on a Task Force for Health Care Reform of Wisconsin Care in 1993, and is a member of the American Society of Internal Medicine, American College of Physicians, American Medical Directors Association, American Geriatric Society, and American Medical Association.

STEVEN C. BERGIN, MD

Stevens Point
DIRECTOR, DISTRICT 4
(1997–2000)

Steven C. Bergin, MD, a board certified obstetrician/gynecologist with the Rice Clinic, is a clinical instructor with the Ob/Gyn Department at the Medical College of Wisconsin. Dr Bergin received his Bachelor of Science degree in Pharmacy from the University of Wisconsin-Madison. He received his medical degree from the Medical College of Wisconsin. Dr Bergin completed a Straight Ob/Gyn internship and residency with the Milwaukee County Medical Complex. He is a member of the Portage County Medical Society, Wisconsin Section ACOG, Wisconsin Society of Obstetrics and Gynecology, American Medical Association, Society of Laparoendoscopic Surgeons, and the American Society for Colposcopy and Cervical Pathology.

KEVIN F. QUINN, MD

Neenah
DIRECTOR, DISTRICT 5
(1995–1998)

Dr Quinn received his medical degree and served a surgical residency at the Medical College of Wisconsin. He was a visiting registrar at Oxford University, John Radcliffe Hospital, Neuffield Department of Surgery. He practiced at he Nicolet Clinic in Neenah from 1982-1989, and is presently in private practice in Neenah.

TERRY L. HANKEY, MD

Neenah
DIRECTOR, DISTRICT 5
(1996–1999)

Dr Hankey graduated from Wright State University and Duke University Medical School. He served his residency in family practice in Madison. He has been in practice in Waupaca for 20 years. For two years, he was residency director at the UW Family Practice Residency in Wausau. He is past president of the Wisconsin Academy of Family Physicians and an alternate delegate to the AAFP. He is a board member of the Wisconsin Institute of Family Medicine and chair of the AAFP Committee on Health Education. Dr Hankey was chair of the WAFP Task Force on Access to Care.

DAVID R. WEBER, MD

Fond du Lac
DIRECTOR, DISTRICT 5
(1997–2000)

Dr Weber is an internist with the Fond du Lac Regional Clinic and Medical Director for Agnesian HealthCare. He is a graduate of the Indiana University School of Medicine and completed an internship and residency with the University of Wisconsin Hospitals. Dr Weber is a member of the Fond du Lac County Medical Society and has been a member of the State Medical Society of Wisconsin for 29 years. He has served on the SMS House of Delegates nominating committee since 1991.

STEPHEN D. HATHAWAY, MD

Green Bay
DIRECTOR, DISTRICT 6
(1995–1998)

A pathologist, Dr Hathway graduated from Indiana University School of Medicine in Indianapolis and completed an internship and residency at the South Bend Medical Foundation in South Bend, Ind. Dr Hathway is a member of the SMS Finance Committee. Dr Hathway was a member of the SMS Health Care Financing and Delivery Commission and served on the Committee on Alcoholism and Other Drug Abuse. He is also a past president and past secretary of the Brown County Medical Society. Currently, Dr Hathway is medical director for American Medical Security.

Anthony R. Mars, MD

Marinette
Director, District 6
(1995–1998)

Dr Mars trained at the Mount Sinai Medical Center in New York City with residencies in internal medicine and anesthesiology. He has since been a resident of Wisconsin and a member of SMS. Locally, Dr Mars has served as medical staff president, liaison officer to the hospital board, and chaired the credentials and surgical committees. In 1992, he received the WISPAC chairman's award for "Outstanding Physician Participation."

David J. Deubler, MD

Kiel
Director, District 6
(1997–2000)

Dr Deubler received his medical degree from the UW-Madison Medical School, and completed an internship and residency in family practice at UW Affiliated Hospitals-Wausau. A board certified family practitioner, he joined the Sheboygan Clinic in 1986 and presently practices in their satellite clinic in Kiel. He is a member of the American Academy of Family Practice and the Wisconsin Academy of Family Practice.

Douglas M. DeLong, MD

Ladysmith
Director, District 7
(1995–1998)

Dr De Long graduated from the University of North Carolina at Chapel Hill School of Medicine in 1979. He served his residency and chief residency in Internal Medicine at Mary Imogene Bassett Hospital in Cooperstown, NY and is currently the president of the Bassett Alumni Association. He obtained added qualifications in Geriatric Medicine in 1985, and served a mini fellowship in Geriatrics at UNC-CH in 1990. He is a member and fellow of the American College of Physicians. Dr De Long is presently a physician-director of the Marshfield Clinic at Ladysmith Center, having joined the group in 1983. He is also a member of the advisory board to the National Farm Medicine Center in Marshfield.

CHARLES V. IHLE, MD

Eau Claire
DIRECTOR, DISTRICT 7
(1997–2000)

Dr Ihle graduated from the UW-Madison Medical School in 1965. He interned at St. Mary's Hospital in San Francisco, and completed his residency in orthopedics at University Hospitals, Madison, He served in the US Navy from 1970-1973, as Chief of Orthopedics at the US Naval Hospital in Taipei, Taiwan. Dr Ihle has been practicing at the Ihle Orthopedic Clinic since July 1973. He is a member of the Commission on Health Care Financing and Delivery.

MARK K. BELKNAP, MD

Ashland
DIRECTOR, DISTRICT 8
(1996–1999)

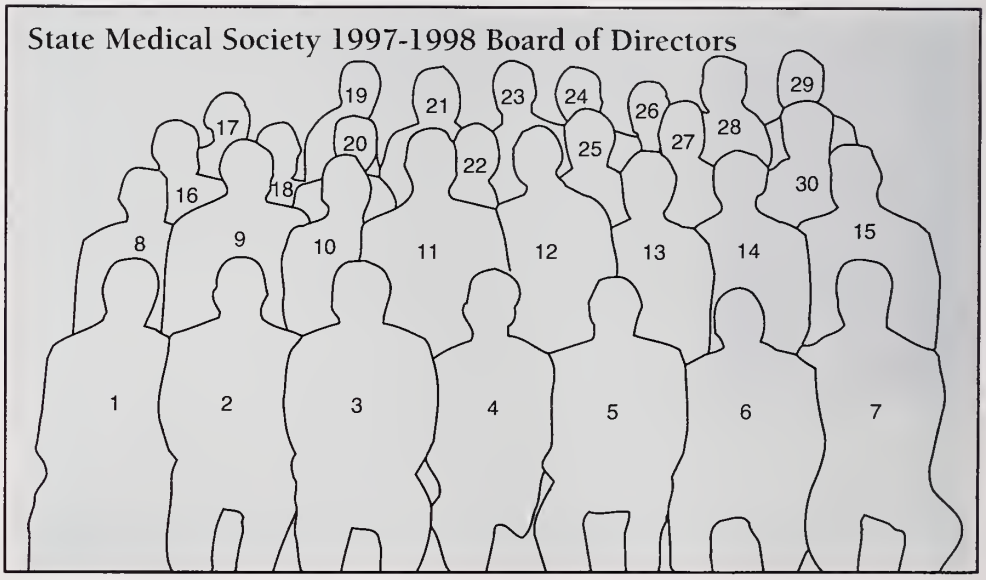
Dr Belknap, a native of Minnesota, is currently staff physician, section of general internal medicine, with the Duluth Clinic-Ashland. From 1985-1994, he was a general internist with Medical Associates North, also in Ashland. He received his medical degree from the University of Minnesota in 1978, and completed a residency in internal medicine from Hennepin County Medical Center in Minneapolis in 1982. Dr Belknap has served as a Board member of the Wisconsin Society of Internal Medicine since 1990, is president of the Chequamegon Chapter of Physicians for Social Responsibility (since 1990), was twice president of the Ashland-Bayfield-Iron County Medical Society, and is a fellow with the American College of Physicians. He has served as a delegate to the State Medical Society of Wisconsin since 1992, and been a member of the Steering, Reference and Mini-Internship Steering Committees.

MICHAEL J. ARMSTRONG, MD

Milwaukee
DIRECTOR, RESIDENT PHYSICIAN SECTION
(1997–1998)

Michael J. Armstrong, MD, is an emergency medicine resident with the Medical College of Wisconsin. He is active in several professional organizations including the American Medical Association Resident Physician Section, Medical Society of Milwaukee County, American College of Emergency Physicians, Society of Academic Emergency Medicine, and the Emergency Medicine Residents Association.

1 Jack M. Lockhart, MD
2 Mark H. Andrew, MD
3 Richard H. Ulmer, MD
4 Sandra L. Osborn, MD
5 John D. Riesch, MD
6 Raymond C. Zastrow, MD
7 Douglas M. DeLong, MD
8 Marvin G. Parker, MD
9 Frank H. Urban, MD
10 Mark K. Belknap, MD
11 Michael C. Reineck, MD
12 Kevin T. Flaherty, MD
13 John E. Patchett, JD
14 Robert F. Purtell, Jr, MD
15 Terry L. Hankey, MD
16 Steven C. Bergin, MD
17 Gerald G. Govin, MD
18 James R. Keuer, MD
19 Charles V. Ihle, MD
20 Robert E. Phillips, MD
21 Paul A. Wertsch, MD
22 David R. Weber, MD
23 Charles E. Holmburg, MD
24 Clarence P. Chou, MD
25 John W. Beasley, MD



26 Alan I. Schwartzstein, MD
27 Stephen D. Hathway, MD
28 David J. Deubler, MD
29 Bradley L. Manning, MD
30 George R. Schneider, MD

Not Pictured
Michael J. Armstrong, MD
Anthony R. Mars, MD
David J. Matteucci, MD
Timothy G. McAvoy, MD
Jerry M. Ingalls, MD
Kevin F. Quinn, MD
Ayaz M. Samadani, MD
Cassandra P. Welch, MD.

Officers of the Society

President
Sandra L Osborn, MD (1997-1998)
2085 County Road J, Verona 53593-8829

President-elect
John D Riesch, MD (1997-1998)
W131 N8029 Country Club Drive
Menomonee Falls 53051

Immediate past president
Richard H Ulmer, MD (1997-1998)
1320 N Shawano Dr, Marshfield 54449

Executive Vice President & Secretary
John E Patchett, JD (1997-1998)
330 E Lakeside St PO Box 1109, Madison 53701

Treasurer
Jack M Lockhart, MD (19971998)
1836 South Avenue, La Crosse 54601

Speaker
Michael C Reineck, MD (1996/1997-1999)
1201 Oak St, West Bend 53095

Vice speaker
Kevin T Flaherty, MD (1996/1996-1998)
614 First St, PO Box 689, Wausau 54402-0689

Board of Directors

Chair: Raymond C Zastrow, MD
Vice Chair: Mark H Andrew, MD

District 1
Kenosha, Milwaukee, Ozaukee, Racine, Walworth, Washington, and Waukesha counties

Robert F Purtell, Jr, MD (1989/1995-1998)
3316 W Wisconsin Ave, Milwaukee 53208

Cassandra P Welch, MD (1995/1995-1998)
2770 North 5th St, Milwaukee 53212

Raymond C Zastrow, MD (1987/1995-1998)
2400 W Villard Ave, Milwaukee 53209

Clarence P Chou, MD (1994/1996-1999)
10028 N Miller Dr, 2W, Mequon 53092-6186

Gerald G Govin, MD (1996/1996-1999)
15720 Mark Dr, Brookfield 53005

Charles E Holmburg, MD (1996/1996-1999)
W180 N7950 Town Hall Rd, PO Box 427
Menomonee Falls 53051-0427

David J Matteucci, MD (1996/1996-1999)
5004 22nd Ave, Kenosha 53140

Timothy G McAvoy, MD (1990/1996-1999)
1751 East Main, Waukesha 53186

Marvin G Parker, MD (1990/1996-1999)
1525 Howe St, Racine 53403

George R Schneider, MD (1989/1997-2000)
9330 W Lincoln Ave, West Allis 53227

Frank H Urban, MD (1993/1997-2000)
3645 Emberwood Dr, Brookfield 53005

District 2
Adams, Columbia, Dane, Dodge, Grant, Green, Iowa, Jefferson, Lafayette, Marquette, Richland, Rock, and Sauk counties

Bradley L Manning, MD (1995/1995-1998)
1108 Nishishin Trail, NE, Madison 53716

John W Beasley, MD (1996/1996-1999)
777 S Mills St, Madison 53715

Jerry M Ingalls, MD (1992/1997-2000)
W5005 Harper Rd, Monticello 53570

Ayaz M Samadani, MD (1991/1997-2000)
148 Warren St, Beaver Dam 53916

Alan I Schwartzstein, MD (1997/1997-2000)
753 N Main St, Oregon 53575

Paul A Wertsch, MD (1993/1997-2000)
4221 Venetian Ln, Madison 53704

District 3
Buffalo, Crawford, Jackson, Juneau, La Crosse, Monroe, Trempealeau, and Vernon counties

Mark H Andrew, MD (1992/1995-1998)
Vernon Memorial Hospital
507 S Main, Viroqua 54665

Jack M Lockhart, MD (1989/1995-1998)
1836 S Ave, La Crosse 54601

District 4
Clark, Florence, Forest, Langlade, Lincoln, Marathon, Oneida, Portage, Price, Taylor, Vilas, and Wood counties

James R Keuer, MD (1995/1995-1998)
9601 Townline Rd, PO Box 1390, Minocqua 54548

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Robert E. Phillips, MD (1995/1995-1998)
1000 North Oak Ave, Marshfield 54449

Steven C Bergin, MD (1997/1997-2000)
617 Linwood Ave, Stevens Point 54481-4428

District 5

Calumet, Fond du Lac, Green Lake, Outagamie, Waupaca, Waushara, and Winnebago counties

Kevin F Quinn, MD (1995/1995-1998)
1147 Glenayre, Neenah 54956

Terry L Hankey, MD (1993/1996-1999)
900 Riverside Dr, Waupaca 54981

David R Weber, MD (1997/1997-2000)
149 Cottage Ave, Fond du Lac 54935

District 6

Brown, Door, Kewaunee, Manitowoc, Marinette, Menominee, Oconto, Shawano, and Sheboygan counties

Stephen D Hathway, MD (1989/1995-1998)
P.O. Box 574, Green Bay 54305

Anthony R Mars, MD (1995/1995-1998)
807 Barbara Lane, Marinette 54143

David J Deubler, MD (1994/1997-2000)
635 Paine St, Kiel 53042

District 7

Barron, Chippewa, Dunn, Eau Claire, Pepin, Pierce, Polk, Rusk, St Croix, Burnett, and Washburn counties

Douglas M DeLong, MD (1995/1995-1998)
906 College Ave W, Ladysmith 54848

Charles V Ihle, MD (1994/1997-2000)
836 Richard Dr, Eau Claire 54701

District 8

Ashland, Bayfield, Douglas, Iron, and Sawyer counties

Mark K Belknap, MD (1996/1996-1999)
922 Second Ave W, Ashland 54806

Resident Physician Section

Michael J Armstrong, MD (1997/1997-1998)
2902 North 77th St, Milwaukee 53222-5016

Ex officio, without vote

Executive Vice President & Secretary Patchett
Patrick Sosnay, Medical Student, UW-Madison

Delegates to the AMA

John D Riesch, MD (1988/1996 & 1997)
W131 N8029 Country Club Ln
Menomonee Falls 53051
Cyril M Hetsko, MD (1994/1997 & 1998)
1313 Fish Hatchery Rd, Madison 53715
Robert F Purtell, Jr, MD (1997/1997 & 1998)
3316 W Wisconsin Ave, Milwaukee 53208
Richard H Ulmer, MD (1994/1997 & 1998)
1320 N Shawano Dr, Marshfield 54449
Susan L Turney, MD (1995/1998 & 1999)
1000 North Oak Ave, Marshfield 54449
Kenneth M Viste, Jr, MD (1993/1998 & 1999)
100 Stoney Beach Rd, Oshkosh 54901
Raymond C Zastrow, MD (1997/1998 & 1999)
2400 W Villard Ave, Milwaukee 53209

Alternate Delegates to the AMA

Kevin A Jessen, MD (1994/1997 & 1998)
1112 Charles Dr, Tomah 54660
Timothy G McAvoy, MD (1997/1997 & 1998)
1751 East Main, Waukesha 53186
John E Ridley, III, MD (1997/1997 & 1998)
2315 N Lake Dr, Milwaukee 53211
Kevin T Flaherty, MD (1994/1998 & 1999)
614 First St, PO Box 689, Wausau 54402-0689
Robert J Jaeger, MD (1995/1998 & 1999)
3291 Thompson Ct, Stevens Point 54481
Richard G Roberts, MD (1996/1998 & 1999)
777 South Mills St, Madison 53715

Young Physicians Section Delegates to the AMA

Scott D Beede, MD (1997 & 1998)
800 W South Ave, La Crosse 54601
Evan K Saunders, MD (1997 & 1998)
2901 W KK River Pkwy, #417, Milwaukee 53115

YPS Alternate Delegate to the AMA

Wendy L Larson, MD (1997 & 1998)
9200 W Wisconsin Ave, Milwaukee 53226
Christopher Stroud, MD (1997 & 1998)
2618 E Collingswood Dr, Beloit 53511

Note: Officers, directors, delegates, alternate delegates, and members of commissions are elected at the Annual Meeting (April, 1997). Dates in parentheses indicate initial year of appointment and beginning and expiration of terms of office. AMA delegates and alternate delegates' terms of office are on a calendar year basis, although elected at the Annual Meeting. ❖

Charter Law of the SMS

Chapter 148

148.015 State society.(1) The State Medical Society of Wisconsin is continued with the general powers of a corporation. It may, from time to time adopt, alter and enforce constitution, bylaws and regulations for admission and expulsion of members, election of officers, and management.

(2) A member expelled from a county medical society may appeal to the state society, whose decision shall be final.

148.02 County societies. (1) The physicians and surgeons, not less than five in number, of the several counties, except those wherein a county medical society exists, may meet at such time and place at the county seat as a majority agree upon and organize a county medical society, and when so organized it shall be a body corporate by the name of the medical society of such county, shall have the general powers of a corporation, and may take by purchase or gift and hold real and personal property. County medical societies now existing are continued with the powers and privileges conferred by this chapter.

(2) Physicians and surgeons who, before April 20, 1897, received a diploma from an incorporated medical college or society of any of the United States or territories or of any foreign country, or who shall have received a license from the medical examining board, shall be entitled to meet for organization or become members of the county medical society.

(3) If there is not a sufficient number of physicians and surgeons in any county to form a county medical society they may associate with those of adjoining counties, and the physicians and surgeons of not more than 15 adjoining counties may organize a county medical society under this chapter, meeting at such time and place as a majority agree upon.

(4) A county medical society may from time to time adopt, alter and enforce constitution, bylaws and regulations for the admission and expulsion of members, election of officers, and management, not inconsistent with the constitution, bylaws and regulations of the state society.

148.03 Service insurance corporations for health care. The state medical society or, in a manner approved by the state society, a county society, may establish in one or more counties of this state a service insurance corporation for health care under ch. 613.

Note on §148.03, 447.13, and 449.15: Chapter 613 provides in general terms for the creation, governance and regulation of service insurance corporations for any kind of health care, as well as for other types of services. All that is needed in each authorizing chapter for professional societies is a brief section giving the appropriate professional society the power to organize a ch. 613 corporation. Section 148.03 creates that section for health care.

One basic restriction results from the repeal of the old enabling sections: none of the professional societies will be able to organize a service insurance plan within its own corporate structure. It is a mistake to permit such a mixing of professional and insurance activities within the same corporation. The society can, of course, control the service insurance corporation it creates under ch. 613, but the service insurance corporation will be legally separate. This will lead to more effective (and appropriate) control by the insurance commissioner, who should neither be empowered nor compelled, as arguably he was under the old statutes, to have any concern about the purely professional activities of the societies, because of the impossibility of disentangling the insurance and professional activities carried on by a single corporation.❖

Constitution

Article I
Name of the Association

The name and title of this organization shall be the State Medical Society of Wisconsin.

Article II
Purpose

The purpose of the Society is to bring together the physicians of the state of Wisconsin to advance the science and art of medicine and the better health of the people of Wisconsin, and to secure the enactment and enforcement of just medical laws. As used in the Constitution and Bylaws, "physician" means a doctor of medicine or a doctor of osteopathy licensed in Wisconsin.

Article III
Component Societies

Component societies shall consist of those county medical societies chartered by the House of Delegates of this Society.

Article IV
Composition of the Association

This Society shall consist of members who shall be the members of and certified by the component county medical societies; and whose dues and assessments for the current year have been received by the Society executive vice president in accordance with the schedule provided in the Bylaws.

Continued on next page

Adopted as amended by the House of Delegates, April 1997.

Continued from preceding page

Article V
House of Delegates

The House of Delegates shall be the legislative body of the Society and shall consist of:

(1) delegates elected by the component county medical societies,

(2) one delegate representing each specialty section of the Society, and one or more delegates representing each of the two medical student special sections, organized under the Bylaws,

(3) a speaker,

(4) a vice speaker.

The officers of the Society enumerated in Article IX of this Constitution, directors, and past presidents of the Society shall be ex officio members, but without the right to vote, except that if they have been duly seated as delegates, they shall have the right to vote. The speaker and vice speaker shall be elected by and from the House of Delegates for two-year terms, and shall be limited to three consecutive full terms in their respective offices. While holding these offices, they shall be members of the House at large and shall not represent any component county society or specialty society.

Article VI
Board of Directors

The Board of Directors, hereinafter referred to as "Board," shall have full authority and power of the House of Delegates between sessions of the House. It shall consist of the resident physician and district directors, immediate past president, president, president-elect, treasurer, speaker and vice speaker of the House of Delegates. The executive vice president shall be an ex officio member of the Board, but without the right to vote. A majority of its voting members shall constitute a quorum. One resident physician director shall be elected by the members of the resident physician section of the Society. District directors shall be elected from eight geographic districts whose boundaries shall be determined by the House of Delegates. There shall be elected one director from each district. In addition, there shall be elected director(s) from each district based on a formula using the number of members in each district as the numerator and the total membership of the Society as the denominator, rounded to the nearest whole number. This calculation shall be made every third year, and, as nearly as possible, is to provide for no more than 31 district directors and shall be based on the year end membership totals. The number of directors established for each district shall be approved by the Board and shall be reported to the districts by the executive vice president before annual elections to the Board. As nearly as possible, one-third of the district director members of the Board shall be elected each year. Each district director shall be nominated and elected only by the elected delegates of the county medical society or societies from the district in which the director's principal place of practice is located. District and resident physician director elections shall be subject to the approval and confirmation of the House of Delegates. The terms of the district directors shall be for three years. The term of the resident physician director shall be for one year. No individual shall be permitted to serve more than three consecutive three-year terms as a district director or four consecutive one-year terms as the resident physician_director, and no more than a total of six terms of service as a district director or a combined total of seven terms of service as the resident physician director and a district director shall be permitted.

Article VII
Specialty Sections

The House of Delegates shall provide for a division of the Society into specialty sections.

Article VIII
Meetings

Section 1. The Society shall hold an annual meeting, at which time the House of Delegates shall meet to conduct its business. The annual meeting may also include scientific sessions as determined by the Board.

Sec 2. The place for holding each annual meeting shall be fixed by the House of Delegates, or by failure to act, such authority is delegated to the Board. The time and the place for holding each annual meeting shall be approved by the Board.

Sec 3. Special meetings of the House of Delegates shall be called by the speaker on written request of twenty delegates representing at least 10% of the component county medical societies, or on request of a majority of the Board. When a special meeting is called, the speaker shall set the time and place. The executive vice president shall mail a notice to the last known address of each member of the House of Delegates at least twenty days before the date of the special meeting. The notice shall specify the time and place of the meeting and the purpose for which the meeting is called. The meeting shall consider no business except that for which it is called.

Article IX
Officers

Officers of this Society shall be a president, a president-elect, an executive vice president, and a treasurer. The president-elect and treasurer shall be elected annually by the House of Delegates. The executive vice president shall be elected and the treasurer shall be nominated annually by the Board. The president-elect shall automatically succeed to the office of president at the conclusion of the term as president-elect. The treasurer shall be limited to nine consecutive terms and must be a director of the Board. No person shall hold more than one of the following offices concurrently: president, president-elect, executive vice president, treasurer, speaker, vice speaker, director, except that the treasurer is a member of the Board. Incumbents shall serve until their successors are elected and installed.

Article X
Funds and Expenses

Funds may be raised by annual dues or by assessment on the members, or in any other manner approved by the House of Delegates. The House may establish regular and special classifications of membership. Dues, if any, shall be applied equitably to all members in each class. All resolutions adopted by the House of Delegates providing for appropriations shall be referred to the Board for implementation. All expenditures approved by the Board shall be included in the annual budget.

Article XI
Referendum

The House of Delegates may, by a two-thirds vote of those registered at that session, submit any question to the membership of the Society for its vote, except amendments to the Constitution. Such amendments are governed by Article XIII. The House shall determine prior to submission whether a referendum shall be advisory or binding, and so advise the membership at the time of submission. A majority vote of all the members of the Society shall determine the question on a binding referendum.

Article XII
Seal

The Society shall have a common seal. The power to change or renew the seal shall rest with the House of Delegates.

Article XIII
Amendments

The House of Delegates may amend any article of this Constitution by a two-thirds vote of the members of the House present at any annual meeting, provided that such amendment shall have been introduced in the form of a constitutional amendment in open session at the previous annual meeting, and that it shall have been published at least once during the year in the Journal of this Society, or sent to each member of the Society at least two months before the meeting at which final action is to be taken.

Bylaws

Chapter 1
Membership

Section 1. The name of a physician on the official roster of this Society, after it has been properly reported by the secretary of the county society, shall be prima facie evidence of membership and of the right to benefits.

Sec 2. No person whose name has been dropped from the roll of members of a component society or this Society shall be entitled to any of the rights or benefits of this Society, except that such rights and benefits shall continue during the period of an appeal by such person to the Board of Directors.

Sec 3. Every physician who holds a license to practice medicine and surgery in Wisconsin shall be eligible to apply for membership. Each county society shall be the judge of the initial and continuing qualifications of its members, as well as the appropriate membership classification, subject to review and final decision by the Board of this Society. Members will conduct themselves in a manner which is not in conflict with the purposes for which the Society is organized and is operating.

Sec 4. By provision of its constitution or bylaws, a county society may require that an applicant shall have practiced within its jurisdiction for a period of one year as a condition for election to membership; or that an applicant may first be elected to membership for a term of one year only, then resubmit to election by vote of the county society without limitations as to term.

Sec 5. A member of a component society whose license has been revoked, suspended, non-renewed, or voluntarily surrendered, shall be immediately and automatically suspended from membership as of the date of revocation, suspension, non-renewal, or voluntary surrender, pending definitive action by the Board.

Sec 6. A physician's county society membership must be held in that county in which the physician's principal practice is located. However, a physician living near a county line may hold membership in that county most convenient for attending meetings, with concurrence of the component society in which the principal place of practice is maintained.

Sec 7. A member whose principal practice is moved from within the territorial limits of a component medical society to the territory of another component of the State Society shall not be eligible to continue membership in the first such society after the expiration of the calendar year in which such move shall have occurred. Such member shall, however, be eligible to apply for membership anew, or by transfer to the society into whose jurisdiction the principal practice has been moved. The member shall be given a written certificate of transfer for transmission to the secretary of the society in the county to which he has moved. Pending acceptance or rejection by the society in the county to which he has moved, such member shall be considered to be in good standing in the first society and in the State Society until the end of the period for which dues have been paid.

Sec 8. When the principal practice of a member in good standing in a component society is moved outside the borders of this state, active membership in such component society and in the State Society may be continued by fulfilling all requirements of membership except residence pending acceptance as a new or transfer member by the society of the area to which the practice has been transferred. The period of such continuing membership in this state shall cease upon acceptance by a society in the new area of practice, and shall in no event continue beyond two full calendar years after that in which the practice location has been transferred.

Sec 9. Membership classifications. Members defined in this section, except affiliates, shall have all the rights and privileges of the Society and shall pay dues and assessments, as indicated, as a requirement of continued membership.

A. *Regular.* Regular members of this Society consist of all the regular members in good standing of the component county societies.

B. *Special.* Included in this classification are the following categories of members who by virtue of their special circumstances are entitled to reduced dues or waiver thereof:

(1) *Part-time practice.* Any physician, regardless of age, who practices 1,000 hours or less during a calendar year, but does not qualify under section 9.B.(5), may upon application, recommendation by the county medical society, and approval by this Society, be placed in this special category.

(2) *Resident.* Physicians in approved training programs as hospital residents or as research fellows who are licensed to practice medicine and surgery in Wisconsin. Such special membership category can be maintained for a maximum of five (5) consecutive years.

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(3) *Temporary Military Service.* Members who are inducted into the United States Military or Public Health Service and serve in such capacity for not more than five (5) years.

(4) *Associate.* Members who suffer a disability preventing them from practicing medicine with resulting serious financial reverses which would make the payment of dues a matter of personal hardship. Such membership shall be on an annual basis, upon recommendation of the county society and approval by the Board of this Society.

(5) *Retired.* Members who have retired completely from the practice of medicine, or who practice 240 hours or less during a calendar year, upon recommendation of the county society and approval by this Society.

(6) *Life.* Those members of the State Medical Society of Wisconsin who have been members of this or other state medical societies for fifty (50) years, or are past presidents of the State Medical Society of Wisconsin. They shall receive a certificate of Life Membership.

(7) *Honorary.* Members who have been elected to a similar classification by their county society because of outstanding contributions to the medical profession, upon approval by the Board of this Society.

(8) *Over Age 70.* Members who are age 70 effective January 1 of the following year.

C. *Affiliate.* Persons who are not otherwise eligible for membership may become affiliated with this Society in one of the following categories. Their dues or assessments, as well as rights and privileges as affiliate members, shall be determined by the Board.

(1) *Candidate.* Upon application, a county medical society or this Society may confer upon any person then attending a medical school in Wisconsin or fulfilling a postgraduate obligation prior to eligibility for licensure the status of Candidate Member.

(2) *Scientific Fellow.* The Board may by invitation and unanimous consent confer upon any person engaged in teaching of or research in one or more of the basic sciences at an accredited college or university, and not holding the degree of Doctor of Medicine or Osteopathy, the status of Scientific Fellow.

(3) *Emeritus.* Retired members who have chosen not to renew their license, at the discretion of the Board.

Sec 10. Dues and Assessments. Members shall pay dues and assessments as follows:

A. *Regular members*: full dues and assessments.

B. *Physicians in part-time practice or over age 70*: one-half of regular member dues and assessments.

C. *Physicians in residency or fellowship training*: dues and assessments are to be determined by the Board of Directors. Dues and assessments for all other categories shall be waived, except as may be determined by the Board for affiliate members.

Chapter II
House of Delegates

Section 1. Each component county society shall be entitled to send one delegate and one alternate to the House of Delegates for each forty regular and special members or majority fraction thereof in this Society, provided, however, that each county society shall be entitled to at least one delegate and one alternate from that county society. For purposes of this section, the number of members as of the close of the calendar year preceding the first session of the House of Delegates at the Annual Meeting shall determine the number of delegates to which a county society shall be entitled. The secretary of each county society will send a list of such delegates and alternates to the executive vice president of this Society by the end of each calendar year preceding the year in which such delegates are elected to serve.

Sec 2. One-fourth of the members of the House of Delegates registered, representing one-fourth of the county medical societies in the state, shall constitute a quorum of the House of Delegates. All meetings of the House of Delegates shall be open to members of the Society.

Sec 3. The speaker shall preside at the meetings of the House of Delegates.

Sec 4. The vice speaker shall officiate for the speaker in the latter's absence or at his request. In case of death, resignation, or removal of the speaker, the vice speaker shall officiate during the unexpired term.

Sec 5. The speaker shall appoint members of reference committees from among the members of the House of Delegates. These committees shall consider and make recommendations to the House relative to resolutions, reports of officers, reports of commissions and committees, financial and other matters germane to the business of the House. The speaker shall also appoint a credentials committee and such other committees as deemed necessary.

Sec 6. The House of Delegates shall elect delegates to the House of Delegates of the American Medical Association in accordance with the Constitution and Bylaws of that body. No person who has served 12 or more consecutive years as a Wisconsin delegate to the AMA shall be eligible to serve another term unless the delegate will concurrently serve on any of the following American Medical Association Councils: Constitution and Bylaws, Medical Education, Medical Service, Ethical and Judicial Affairs, Long Range Planning and Development, Legislation, Scientific Affairs; or, the American Medical Political Action Committee Board of Directors.

Sec 7. The House of Delegates shall have authority to create committees for special purposes and to appoint members of the Society who need not be members of the House of Delegates. Such committees shall report to the House of Delegates, and their members may be present to participate in the debate on their reports.

Sec 8. It shall receive for appropriate action the annual reports of the treasurer, executive vice president, and chair of the Board of Directors.

Sec 9. Unanimous consent of the House of Delegates shall be required for the introduction of any new resolution or business not filed in proper form with the executive vice president's of-

fice of the Society two months before the first session of the House of Delegates. This section shall not apply to new business or resolutions presented by the Board of Directors or any member thereof, the constitutional officers, committees of the Society or of the House of Delegates, or officers of the House of Delegates.

Sec 10. All questions of an ethical nature brought before the House of Delegates shall be referred to the Board of Directors without discussion.

Chapter III
Annual Election

Section 1. The House of Delegates, at its first session of the annual meeting, shall elect a Committee on Nominations consisting of one (1) delegate for each district, except that in any district having five hundred (500) or more regular and special members, there shall be elected one (1) additional delegate for each additional five hundred (500) members or majority fraction thereof. One (1) delegate representing the specialty sections shall also be appointed. Nominating committee members shall be limited to six (6) consecutive terms. Those committee members who have served six (6) consecutive terms upon adjournment of the final session of the 1994 House of Delegates annual meeting and following years shall have met this requirement. This committee shall become operative at the close of the final session of that annual meeting and shall function until the close of the final session of the following year's Annual Meeting. The incoming committee shall meet with the existent committee but without vote during the overlapping days of the annual meeting. Any vacancy occurring in the Committee on Nominations between the date of its formation and the time of its reporting shall be filled by appointment by the director or directors of the district in which the vacancy occurs, or if a nominating committee member is unable to attend a nominating committee meeting or is a candidate for an office a substitute for that member shall be named by the most senior director available from the affected district by written notification to the executive vice president prior to the meeting of the nominating committee, provided that if the vacancy or need for substitution occurs in the representation from the specialty sections, such vacancy or substitution shall be filled by ballot from among the section delegates. The Committee on Nominations shall convene at least two (2) months prior to the annual meeting of the House of Delegates to prepare a slate of candidates. This meeting, to be held at a time, date and location published to the general membership at least two (2) months before this meeting, shall include an open session of not less than one (1) hour to allow individual nomination of candidates. The Committee shall report the result of its deliberations to the House of Delegates in the form of a ticket containing the name of the Board nominee for treasurer and the names of one or more members for each of the other positions to be filled.

Sec 2. The report of the Committee on Nominations and elections shall be the first order of business of the House of Delegates at the third session of the annual meeting.

Sec 3. The House of Delegates shall elect the president-elect, the treasurer, the speaker and vice speaker of the House of Delegates, and the delegates and alternates to the American Medical Association. Where there is no contest, a majority vote without ballot shall elect. All other elections shall be by separate ballot for each individual position, and a majority of the votes cast shall be necessary to elect. If no nominee receives a majority of the votes on the first ballot, the nominee receiving the lowest number of votes shall be dropped, except where there is a tie, and a new ballot taken. This procedure shall be continued until one of the nominees receives a majority of the votes cast.

Sec 4. Nothing in this chapter shall be construed to prevent additional nominations being made from the floor by members of the House of Delegates.

Chapter IV
Duties of Officers

Section 1. The president is the chief constitutional officer of the Society. Within the limits of the Constitution, Bylaws, and policies of the House of Delegates and Board of Directors, the president shall have the following responsibilities and commensurate authority:

a. deliver an annual address to the House;
b. serve as a member with right to vote on the Board;
c. preside at meetings of the Executive Committee of the Board;
d. participate, ex officio and without the right to vote, in sessions of the House;
e. initiate and propose policies and programs that will further the goals and objectives of the Society for consideration by the House, Board, commissions and committees;
f. support and articulate policies and programs adopted by the Board and the House.
g. promote physician interest and active participation in the Society.

Sec 2. The president-elect shall act for the president in his absence or disability. If the office of president should become vacant, the president-elect shall succeed to the presidency. In case of vacancy in the office of both president and president-elect, the Board shall appoint one of its members as acting president until the next meeting of the House of Delegates.

Sec 3. The treasurer shall be responsible to the Board of Directors, and shall advise and assist it in making decisions on investment policy and financial matters. The duties of the treasurer shall include the following:

a. Be responsible for all funds due the Society, together with bequests and donations;
b. Pay money out of the treasury only on written order of the secretary;
c. Subject the treasurer's accounts to such examination as the House of Delegates may order;
d. Annually report on the financial standing of the Society, including a balance sheet and income and expense report;
e. Give bond in such amount as the Board may provide.
f. Serves as chair of the Finance Committee of the Board.

Sec 4. The executive vice president is the chief executive officer of the Society charged with the execution of policy as created and defined by the House of Delegates and the Board of Directors. The executive vice president shall serve as an ex officio, nonvoting member of the Board; be responsible to the Board and serve as its secretary;

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assist the Board and officers in making decisions and implementing actions; share convictions and argue their merits; perform the functions ordinarily assigned to the office of executive vice president, and make an annual report to the House of Delegates. "As chief executive officer the executive vice president shall, within the limits of the Constitution and Bylaws and Board operating policies, effectively perform the general managerial function for the Society and all of its divisions, activities, and personnel including employment and, as necessary, termination of all employees; be responsible for and have the necessary authority to direct, supervise, and coordinate all programs, projects and major activities of the Society and all wholly owned subsidiaries; formulate and recommend for approval of the Board basic policies and programs which will seek to achieve the objectives and goals of the Society; fully inform the Board on the condition and operation of the association; cooperate with the Board and Treasurer in establishing a program of fiscal responsibility for the Society including development, recommendation and upon approval, operation within an annual budget; act to insure that all funds, physical assets, and other property of the Society are appropriately safeguarded and administered; develop and maintain effective internal and external communications with the membership and other organizations and agencies, both public and private, so as to enhance the positions of the Society and the objectives of its membership; and through effective management and leadership, achieve economic, productive performance, forward-looking programming, and constructive growth of the Society."

Note: Following adoption of this Bylaw change (Sec. 4 above) in 1987, the Board agreed to develop and maintain a set of current "operating policies" between itself and the secretary to detail the more specific duties and expectations important to a good working relationship between the Board and the secretary.

Chapter V
Board of Directors

Section 1. The Board of Directors shall be the executive body of the Society. Between meetings of the House of Delegates it shall exercise the power conferred on the House of Delegates by the Constitution and Bylaws.

Sec 2. The Board shall meet during the annual meeting and at such other times as necessity may require, subject to the call of the chairman or on petition of three directors. It shall hold an annual meeting for purposes of organization and other business.

Sec 3. The Board shall elect a chairman and a vice chairman from among its voting members. It may create such further offices or combine or abolish them as it sees fit in the management of its affairs and in the discharge of its responsibilities. Its chairman shall submit an annual report to the House of Delegates including all major actions and policy decisions of the preceding year.

Sec 4. Each district director shall be the organizer and mediator for the district. District directors shall visit each county in their district as needed for the purpose of organizing component societies where none exist, for inquiring into the condition of the profession, and to keep informed of the activities of the component societies in the district. Each district director shall arrange for an annual conference or caucus with the societies or their delegates within the district, at which time information shall be disseminated concerning the activities of the State Medical Society and component societies within the district. Each district director and the resident physician director shall report as necessary to the Board. The necessary traveling expenses incurred by each director in the line of duties herein imposed may be allowed on a proper itemized statement, but this shall not be construed to include the expense of attending the annual meeting of the Society.

Sec 5. The Board of Directors shall be the judicial body of the Society. It may decide any questions of conduct or discipline of members, or any questions involving the rights and standing of members, whether in relation to other members, to the component societies, or to this Society. It shall develop and publish procedures for discipline, including denial of initial or continuing membership, for those physicians who fail to provide quality health care, failure to pay dues, loss of license to practice, or other cause. Its decisions in all cases shall be final, including the right to expel a member should a component society fail to do so after being so requested by the Board. The Board's right to original jurisdiction includes but is not limited to the right to decide cases when:

a. the affected parties reside within the boundaries of a single county medical society and that society does not wish to assume jurisdiction;
b. the affected parties reside in two or more component medical society jurisdictions. The Board also has within its authority the right to appoint a commission or commissions to which any or all such matters may be referred for investigation, evaluation and decision to acquit, admonish, or otherwise discipline as appropriate. A member may appeal to the Board the decision of such commission or the action of a county society as provided in Chapter X, Section 3. If the recommendation is for suspension or expulsion of a physician from Society membership, final action must be taken by the Board.

Sec 6. Charters shall be issued to county societies only on approval of the Board, with ratification by the House of Delegates, and shall be signed by the president and executive vice president of this Society. Upon the recommendation of the Board, the House of Delegates may revoke the charter of any component society whose actions are in conflict with the letter or spirit of this Constitution and Bylaws.

Sec 7. In sparsely settled sections, the Board shall have authority to organize the physicians of two or more counties into societies. These societies, when organized and chartered, shall be entitled to all rights and privileges provided for component societies until such counties shall be organized separately.

Sec 8. The Board shall provide for and superintend the issuance of all publications of the Society including proceedings, transactions and memoirs, and shall have the authority to appoint an editor of the Journal and such assistants as it deems necessary.

Sec 9. The Board shall select a qualified independent accounting firm and receive an annual audit of all accounts of this Society. With the treasurer, it shall supervise the investment of funds.

The Board shall adopt an annual budget providing for the necessary expenses of the Society.

Sec 10. The Board may, by interim appointment, fill any vacancy in office not otherwise provided for which may occur during the interval between annual meetings of the House of Delegates, except a vacancy in the remainder of the term of the resident physician director shall be filled only by appointment by the chair of the resident physician section of the Society. The appointee shall serve until a successor has been elected and has qualified. When a district initially qualified for an additional director, such position shall be considered new and not a vacancy to which the Board is authorized to make an interim appointment. Such new position shall be filled by election at the next meeting of the House of Delegates in the manner provided by Article VI of the Constitution. The initial term shall be so established as to maintain the election of substantially one-third of the district directors each year.

Sec 11. The Board may elect as executive vice president one who need not be a physician or a member of the Society.

Sec 12. The Board shall provide such facilities for the Society as may be required to properly conduct its business.

Sec 13. The Board shall nominate a director to serve as treasurer and shall report the nominee to the Committee on Nominations in the manner provided by Chapter III of the bylaws.

Sec 14. There shall be an Executive Committee of the Board which shall consist of the president, the president-elect, the immediate past president, the chair and vice chair of the Board, the chair of the Finance Committee, the speaker, and two additional district directors to be appointed annually by the chair of the Board. The Alliance president and president-elect shall be ex-officio non-voting members. The Executive Committee shall possess and may exercise all the powers of the Board of Directors between meetings of the Board. The Executive Committee shall meet prior to the meetings of the Board and at such other times as may be required, subject to the call of the chair or on petition of three voting members, and shall report all actions taken by it to the next meeting of the Board, for its consideration.

Chapter VI
Commissions and Committees

Section 1. The Board shall appoint such commissions and committees, either permanent or ad hoc, as it deems necessary to properly conduct the affairs of the Society. Membership on such committees and commissions shall be limited to members of the Society and its Alliance. Nonmembers of the Society or its Alliance may be appointed as special representatives should their expertise and knowledge be of benefit to the goals of such commissions or committees. Such individuals shall not have the right to vote or hold office. Each commission and committee shall have the duty of being informed on matters within the area of its special interest. They shall represent the Society's interests by continual contacts with voluntary and governmental agencies having related concerns with the intention of coordinating efforts to serve the health interests of the people of Wisconsin. They shall develop recommendations from their studies and activities for action by the Board or House of Delegates.

Sec 2. Specialty sections shall be regarded as special committees of the Society from which the Board or any commission or committee may seek advice and assistance on matters of special or general concern to the profession and the health of the people of Wisconsin. The specialty sections will be expected to give special requests prompt consideration and response so as to enable the Society to make maximum use of their resources.

Chapter VII
Dues and Assessments

Section 1. The annual dues and assessments of this Society shall be determined by the House of Delegates and shall be levied per capita on the members. Dues and assessments shall be payable as determined by the Board of Directors. Any member whose current year's dues have not been received by the executive vice president on or before the dues payment deadline, as established by the Board of Directors, shall be deemed in arrears and shall be removed from the membership rolls of the county society and this Society until such time as full dues for the current year have been received.

Sec 2. The record of payment of dues and assessments on file in the offices of this Society shall be final as to the fact of payment by a member and to the right to participate in the business and proceedings of the Society or the House of Delegates and to any other benefits and privileges of membership.

Chapter VIII

The Board of Directors shall adopt ethical guidelines for the members of this Society.

Comment: On July 18, 1981 the Board of Directors adopted the Principles of Medical Ethics of the AMA as the ethical guidelines of the Society.

Chapter IX

The current edition of Sturgis Standard Code of Parliamentary Procedure governs this organization in all parliamentary situations that are not provided for in the law or in its charter, constitution, bylaws, or adopted rules.

Chapter X
County Societies

Section 1. All present county societies or those that may hereafter be organized in this state shall, upon application to the Board of Directors, receive charters from this Society, provided that their constitutions and bylaws have been submitted to the Board and found in conformity with the Constitution and Bylaws of the State Medical Society. All revisions shall be submitted to the Society, approved by the Board, and filed with the executive vice president. Where a county society has lost or misplaced its constitution and bylaws, the model constitution and bylaws for county medical societies, as last approved by the Board, shall be deemed to apply.

Sec 2. Only one component medical society shall be chartered in each county.

Sec 3. Any physician who may feel aggrieved by the action of the society of his county in suspending or expelling him shall have the right to appeal to the Board of Directors of the State Society. Its decision shall be final. A county society shall at all times be permitted to appeal or refer questions involving

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membership to the Board of the State Society for final determination. The mechanisms and procedures which apply to the appeal process shall be those adopted by the Board.

Sec 4. Each component county society shall elect one or more delegates and may elect an equal number of alternates to substitute for any absent delegates from that component society, for a term of two calendar years, to represent it in the House of Delegates of this Society, in accordance with Chapter II, Section 1, of these Bylaws. The term of office shall begin on January 1 of the year succeeding the election of such delegates and alternates.

Sec 5. The secretary of each county society shall keep a roster of its members.

Chapter XI
Specialty Sections

Section 1. The House of Delegates shall establish specialty and special sections within the Society. It shall have the power to combine, enlarge, or discontinue any or all of such sections so established using the following guidelines:

a. For specialty section to be designated it must represent a specialty which is represented in the American Medical Association House of Delegates and
b. Have at least twenty (20) members of the specialty who are members of this Society.
c. If no representative from the specialty section registers as a representative of that section for three (3) consecutive annual meetings, the specialty section will be dropped with the option of reapplying after one year, provided the above criteria are met.
d. From time to time special sections not meeting the above criteria may be established by the House of Delegates.

Sec 2. Such sections so established shall be based upon those divisions of medicine in which the various members possess a special interest. Qualifications for membership in any section shall be established by the members of such section, subject to approval of the Board of Directors, Scientific meetings of a section shall be open to all members in good standing of the State Medical Society.

Sec 3. The officers of each section shall be elected by and from its membership. The terms of such officers shall be for one year, but any officer may be reelected.

Sec 4. No section shall have the power to bind the State Medical Society by any resolution or other action. No such resolution or action shall be publicized unless it shall first have been approved by the House of Delegates, or by a majority of the Board when the House is not in session. No resolution adopted by any section shall be effective until likewise so approved.

Sec 5. Each section, except the two medical student special sections, shall elect a delegate and an alternate to the House of Delegates. The term shall be for two calendar years without limitation on number of terms.

Sec 6. There shall be two special sections for medical student members of the Society, one representing the University of Wisconsin and one representing the Medical College of Wisconsin, which shall each be entitled to elect one delegate and one alternate to the House of Delegates for each forty candidate members or majority fraction thereof in this Society determined as of the close of the calendar year preceding the first session of the House of Delegates Annual Meeting, provided, however, that these sections shall each be entitled to at least one delegate and one alternate. The term shall be for one calendar year without limitation on number of terms.

Sec 7. The resident physician section shall be entitled to elect one section member, for a term of one year not to exceed four terms, as the resident physician director to the Board of Directors.

Sec 8. The specialty sections of the Society shall be considered an integral part of the working committee structure of the Society as outlined in Chapter VI of these Bylaws.

Chapter XII
Amendments

These Bylaws may be amended at any annual meeting by a majority vote of the delegates present, if the proposed amendment has been properly submitted to the House of Delegates and has laid over for one session of that annual meeting. ❖

American Medical Association Principles of Medical Ethics

PREAMBLE: The Medical profession has long subscribed to a body of ethical statements developed primarily for the benefit of the patient. As a member of this profession, a physician must recognize responsibility not only to patients, but also to society, to other health professionals, and to self. The following Principles adopted by the American Medical Association are not laws, but standards of conduct which define the essentials of honorable behavior for the physician.

I. A physician shall be dedicated to providing competent medical service with compassion and respect for human dignity.

II. A physician shall deal honestly with patients and colleagues, and strive to expose those physicians deficient in character or competence, or who engage in fraud or deception.

III.A physician shall respect the law and also recognize a responsibility to seek changes in those requirements which are contrary to the best interests of the patient.

IV.A physician shall respect the rights of patients, of colleagues and of other health professionals, and shall safeguard patient confidences, within the constraints of the law.

V. A physician shall continue to study, apply and advance scientific knowledge, make relevant information available to patients, colleagues and the public, obtain consultation, and use the talents of other health professionals when indicated.

VI. A physician shall, in the provision of appropriate patient care, except in emergencies, be free to choose whom to serve, with whom to associate, and the environment in which to provide medical services.

VII. A physician shall recognize a responsibility to participate in activities contributing to an improved community.

Reference Committee on Scientific Activities during House of Delegates. Seated left to right: Kesavan Kutty, MD; Kay A. Heggestad, MD; Frank J. Salvi, MD; James T. Paloucek, MD; James D. Buck, MD; David R Weber, MD.

Wisconsin Delegation to the American Medical Association, 1997

At the AMA 1996 Annual and Interim Meetings a broad range of issues was considered in socio-economics, science, medical education and public health.

At the 1996 Annual Meeting, the Study of the Federation was adopted. The study outlined how the AMA, state, county and specialty medical societies can work together to meet the future needs of patients and physicians. The recommendations are aimed at enhancing coordination among Federation members and minimizing duplication of services, while creating a House of Medicine that will speak with a stronger, more unified voice. Two issues which generated considerable discussion included point of service provisions in managed care plans and physician-assisted suicide.

Wisconsin introduced the following resolutions at the 1996 Annual Meeting:

Res. 4 - Patient/Physician Covenant (introduced by Oregon and Wisconsin delegation) - **Resolved,** That the American Medical Association endorse the following Patient-Physician Covenant: Medicine is, at its center, a moral enterprise grounded in a covenant of trust. This covenant obliges physicians to be competent and to use their competence in the patient's best interests. Physicians, therefore, are both intellectually and morally obliged to act as advocates for the sick wherever their welfare is threatened and for their health at all times.

Today, this covenant of trust is significantly threatened. From within, there is growing legitimation of the physician's materialistic self-interest; from without, for-profit forces press the physician into the role of commercial agent to enhance the profitability of health care organizations. Such distortions of the physician's responsibility degrade the physician-patient relationship that is the central element and structure of clinical care. To capitulate to these alterations of the trust relationship is to significantly alter the physician's role as healer, carer, helper and advocate for the sick and for the health of all. By its tradition and very nature, medicine is a special kind of human activity--one that cannot be pursued effectively without the virtues of humility, honesty, intellectual integrity, compassion and effacement of excessive self-interest. These traits mark physicians as members of a moral community dedicated to something other than its own self-interest.

Our first obligation must be to serve the good of those persons who seek our help and trust us to provide it. Physicians, as physicians, are not and must never be commercial entrepreneurs, gateclosers or agents of fiscal policy that runs counter to our trust. Any defection from the primacy of the patient's well-being places the patient at risk by treatment that may compromise quality of or access to medical care.

We believe the medical profession must reaffirm the primacy of its obligation to the patient through national, state and local professional societies; our academic, research and hospital organization; and especially through personal behavior. As advocates for the promotion of health and support of the sick, we are called upon to discuss, defend and promulgate medical care by every ethical means available. Only be caring and advocating for the patient can the integrity of our profession be affirmed. Thus we honor our covenant of trust with patients. **Action:** Referred to the Board of Trustees.

Res. 122 - Telemedicine - **Resolved,** That the American Medical Association study the ethical and legal questions raised by new communications technologies, including the worldwide web and teleconferencing as they relate to medical practice. **Action:** Substitute resolution adopted: **Resolved,** That the American Medical Association Board of Trustees study the ethical and legal questions raised by new communications technologies as they relate to medical practice, including the worldwide web, teleconferencing, physician-staffed phone services that provide medical advice to nonpatients, and open physician discussions of clinical matters online services. **Action:** Substitute resolution adopted: **Resolved,** That the American Medical Association Board of Trustees study the ethical and legal questions raised by new communications technologies as they relate to medical practice, including the worldwide web, teleconferencing, physician-staffed phone services that provide medical advice to nonpatients, and open physician discussions of clinical matters on online services.

Res. 423 - Tobacco Sale Regulation - **Resolved,** That the American Medical Association develop and support model legislation intended to be utilized by state medical societies to pursue efforts to regulate tobacco *like* alcohol at the retail level; and be it further Resolved, That the American Medical Association develop and support legislation which would regulate the wholesale distribution of tobacco by the Bureau of Alcohol, Tobacco and Firearms in a *like* manner as alcohol. **Action:** Reaffirmed.

Res. 424 - Study of Correctional Health Care - **Resolved,** That the American Medical Association call for a national task force which would evaluate health care in federal, state, and county detention

Delegates:
Cyril M. Hetsko, MD, Madison (chair); Robert F. Purtell, Jr, MD, Milwaukee; John D. Riesch, MD, Menomonee Falls; Susan L. Turney, MD, Marshfield; Richard H. Ulmer, MD, Marshfield; Kenneth M. Viste, Jr., MD, Oshkosh.

Alternates:
Kevin T. Flaherty, MD, Wausau (secretary); Robert J. Jaeger, MD, Stevens Point; Kevin A. Jessen, MD, Tomah (vice chair); Timothy G. McAvoy, MD, Waukesha; John E. Ridley, III, MD, Milwaukee; Richard G. Roberts, MD, Madison.

Wisconsin is also represented by: Thomas H. Browning, MD, Madison (delegate, American Society for Gastrointestinal Endoscopy); Richard Lindgren, MD, Madison (alternate delegate, American College of Nuclear Medicine); Michael Miller, MD, Madison (delegate, American Society of Addiction Medicine); and Stephen B. Webster, MD, La Crosse, (delegate, American Academy of Dermatology).

facilities. **Action:** Substitute resolution adopted: **Resolved,** That our American Medical Association ask the National Commission on Correctional Health Care to study health care in federal, state and county correctional and juvenile detention facilities, with particular attention paid to issues of disease transmission within a facility, the need to address all aspects of physical and mental health, and follow-up care for individuals returning to the community.

Wisconsin introduced the following resolutions at the AMA 1996 Interim Meeting:

Res. 105 - State Health Insurance Risk Sharing Pools for the Uninsured - Resolved, That the American Medical Association seek implementation of existing AMA Policy 165.984 that would require self-insured groups to participate in state health insurance risk sharing pools for the uninsured. **Action:** Adopted.

Res. 106 - Health Insurance Policy Information - Resolved, That the American Medical Association work with input from representatives of the insurance industry to define several levels of health insurance coverage in order that the consumer could be certain that a policy was inclusive enough for his/her needs and would allow cost comparisons of similar policies; and be it further Resolved, That the AMA urge that health insurance policies explicitly and specifically list exclusions from coverage in order that these omissions are apparent and comparable. **Action:** Adopted.

Res. 707 - Use of the Term "Gatekeeper" - Resolved, That the American Medical Association encourage all components of organized medicine to minimize the use of the term "gatekeeper" when making any reference to primary care physicians or to their role. **Action:** Adopted.

At the AMA 1996 Annual Meeting, Cyril M. "Kim" Hetsko, MD, of Madison was re-elected to the Council on Medical Service. Timothy T. Flaherty, MD, of Neenah, serves on the AMA Board of Trustees (he was reelected to another three-year term at the 1997 AMA Annual Meeting) and its Executive Committee; Kenneth M. Viste, Jr., MD, of Oshkosh, is completing his service on the Council on Legislation.

John P. Mullooly, MD, of Milwaukee, resigned from the delegation in December 1996. Doctor Mullooly had been a delegate since 1991 and prior to that served as an alternate delegate since 1985. On November 8, 1996, Jerome W. Fons, Jr., MD, of Greenfield, passed away. He had served as an alternate delegate since 1988. John K. Scott, MD, of Madison, passed away on February 4, 1997. Doctor Scott had served as a delegate from 1976-1994 and as an alternate delegate from 1976-1979. Franklin A. Smith, MD, of Appleton (delegate, American Academy of Insurance Medicine) retired at the end of 1996.

Special Sections to the AMA:

The work of a number of other Wisconsin representatives to the AMA's special sections also deserves mention for their efforts and activities during the past year. The Young Physicians Section was represented by Evan Saunders, MD, of Milwaukee, and Christopher Stroud, MD, of Beloit.

A number of Wisconsin physicians participate in the AMA's Organized Medical Staff Section. A strong contingent of students and residents also attend the AMA's Medical Student Section and the Resident Physician Section (RPS). At the 1996 Annual Meeting, Charles Rainey, MD, of Milwaukee, was elected Secretary of the RPS. At the interim meeting, Michael Bigelow, of Milwaukee, was elected as chair-elect of the MSS-AMA Governing Council.

The following is a list of SMS commissions and task forces, and their members for 1997-98. The original year of each member's appointment, as well as the expiration of his or her term, at the annual meeting of the year designated appears with each member's name. Chairs of commissions are appointed for one-year terms by the Board of Directors. Vice chairs are elected at the first meeting of each commission following the annual meeting. This issue of the *WMJ* is prepared prior to most of these elections; therefore, some commissions will not include these designations.

Commissions

Addictive Diseases

This commission shall be concerned with the prevention, treatment and rehabilitation of addictive disorders, with an emphasis on conditions of alcohol, nicotine, and other drug abuse and dependence, as well as support services for family members and those affected by such conditions. The commission shall also be dedicated to the improvement of medical students', residents' and practicing physicians' awareness and education regarding the diagnosis and treatment of addiction.

Randall J. Kieser, MD, Verona
1992/1995-1998
George Locher, MD, Wausau
1993/1995-1998
Mary A. Mikus, DO, Waukesha
1997/1997-1998
Thomas H. Peterson, MD, Wausau
1989/1995-1998
Anne M. G. Schierl, MD, Stevens Point
1989/1995-1998
Leonard W. Worman, MD, Milwaukee
1993/1995-1998
Michael G. Deeken, MD, Wauwatosa
1990/1996-1999
Edward S. Friedrichs, MD, Brown Deer
1995/1996-1999
Fred H. Koenecke, Jr, MD, Richland Center
1990/1996-1999
Michael M. Miller, MD, Madison
1990/1996-1999, chair
Kathryn P. Nichol, MD, Milwaukee
1997/1997-1999
Sheila W. Sorkin, MD, Elm Grove
1993/1996-1999
Gay R. Anderson, MD, Neenah
1997/1997-2000
David R. Hendricks, MD, Madison
1994/1997-2000
Brian E. Lochen, MD, Madison
1991/1997-2000, vice chair
Lance P. Longo, MD, Whitefish Bay
1997/1997-2000
Edwin G. May, MD, Stevens Point
1997/1997-2000
James T. Mulry, MD, Whitewater
1996/1997-2000
Barry Spiegel, DO, Janesville
1997/1997-2000
Jane Campbell, Neenah, Alliance
Irene Thearle, Oshkosh, Alliance

Staff support: Anne Bicha/Karen Baier

Continuing Medical Education

This commission shall consist of up to 20 appointed members and the deans of the two medical schools in Wisconsin with vote. It shall be responsible for all matters relating to the whole continuum of medical education, i.e., medical school and residency training as well as continuing medical education. In addition, it shall be responsible for liaison with the medical schools in Wisconsin, their students, residents, fellows and departments of continuing medical education; liaison with specialty societies and other commissions in the achievement of these goals. It shall be responsible for accreditation of continuing medical education in hospitals and other institutions or organizations within the state.

Jan P. De Roos, MD, Sheboygan
1995/1995-1998
Vernon N. Dodson, MD, Madison
1992/1995-1998
Kesavan Kutty, MD, Milwaukee
1993/1995-1998, vice chair
Harpreet S. Patheja, MD, Racine
1997/1997-1998
L. Cass Terry, MD, Ph.D., Milwaukee
1990/1995-1998
John W. Beasley, MD, Madison
1988/1996-1999
Richard P. Day, MD, Madison
1993/1996-1999, chair
Robert H. Fisher, MD, Menomonee Falls
1997/1997-1999
Thomas C. Meyer, MD, Madison
1996/1996-1999
Pontus G. Ostman, MD, Fond du Lac
1996/1996-1999
Thomas C. Gabert, MD, Woodruff
1994/1997-2000
Thomas J. Grau, MD, La Crosse
1991/1997-2000
Patricia F. Harris, MD, Madison
1997/1997-2000
Charles E. Holmburg, MD, Menomonee Falls, 1994/1997-2000
Elizabeth Tucker-Sanfelippo, MD, Milwaukee, 1990/1997-2000
Ravinder Vir, MD, Hayward
1997/1997-2000

Medical School Deans' designees:
Donald R. Harkness, MD, UW-Madison
Michael D. O'Donnell, Medical College of Wisconsin

Staff support: Kristin Krueger/Lisa Lawry

Environmental and Occupational Health

This commission shall be concerned with the health and safety of persons in relation to their environment and occupation.

Henry A. Anderson, MD, Madison
1992/1995-1998
Al Baltrusaitis, DO, Brookfield
1995/1995-1998
Gerald A. Bucholtz, MD, Marshfield
1995/1995-1998
Bruce A. Kraus, MD, Columbus
1997/1997-1998
Jane K. Sliwinski, MD, Green Bay
1990/1995-1998
Tuenis D. Zondag, MD, Eau Claire
1994/1995-1998
John T. Bolger, MD, Waukesha
1990/1996-1999
Richard F. Jones, MD, Green Bay
1996/1996-1999
Larry A. Lindesmith, MD, La Crosse
1993/1996-1999
Thomas T. Midthun, MD, Merrimac
1993/1996-1999
Marvin G. Parker, MD, Racine
1994/1996-1999
Alison S. Wilmeth, MD, Belleville
1996/1996-1999
David L. Drury, MD, Whitefish Bay
1994/1997-2000
Michael J. Goldstein, MD, Madison
1994/1997-2000
Julie N. Larsen, MD, Oconomowoc
1992/1997-2000, vice chair
Mark C. Moore, MD, Madison
1994/1997-2000
John J. Ouellette, MD, Madison
1991/1997-2000
Mark A. Roberts, MD, Milwaukee
1991/1997-2000, chair
Dennis E. Schultz, MD, Franklin
1997/1997-2000
Bryant Weber, Manitowoc
WMGMA representative
Betty Kuplic, Sheboygan Falls
Alliance

Staff support: Lynn Sherman/Karen Baier

Geriatric Health

This commission shall be concerned with geriatric health care issues and services, the process of aging, and the means to achieve the best possible health status and care for the aged. This shall include services provided in nursing facilities and in the home.

Maury B. Berger, MD, Milwaukee
1995/1995-1998, co-vice chair
Joseph N. Blustein, MD, Madison
1992/1995-1998, co-vice chair
Gary J. Leo, DO, Milwaukee
1993/1995-1998
Brian P. McSorley, MD, Milwaukee
1995/1995-1998
Michael G. O'Mara, MD, Oconomowoc
1994/1995-1998
Evelyn E. Burdick, MD, Milwaukee
1996/1996-1999
Richard W. Clasen, MD, Nekoosa
1996/1996-1999
Kae L. Ferber, MD, Madison
1995/1996-1999
Gerald H. Klomberg, MD, Juneau
1996/1996-1999
Alan S. Lieberthal, MD, Milwaukee
1996/1996-1999
Rick A. Erdman, MD, La Crosse
1997/1997-2000
Scott S. Erickson, MD, Marshfield
1994/1997-2000
Richard S. Kane, MD, Milwaukee
1989/1997-2000, chair
Thomas R. Loepfe, MD, La Crosse
1997/1997-2000
Thomas M. Naughton, MD, New Berlin
1994/1997-2000

Staff support: Lynn Sherman/Merry Earll

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Governmental Affairs

This commission shall plan, organize, and implement programs to protect and preserve the legislative, socioeconomic, and political interests of the members of the State Medical Society of Wisconsin. The commission shall analyze state and federal legislation and administrative rules and policies, and recommend to the Board of Directors specific actions and positions designed to carry out this responsibility, and will promote and encourage Society members to be politically active individually and collectively. This commission shall consist of members appointed by the Board of Directors in a number deemed sufficient to execute the responsibilities delegated to the commission. Membership on the commission shall also include a representative appointed by each of the specialty sections of the Society, subject to approval by the Board of Directors. The President, President-elect, Immediate Past President, and Chairman of the Board of the Society shall serve as ex officio members of the commission with vote.

Gary L. Bryant, MD, La Crosse
1993/1995-1998
Mehran Heydarpour, MD, Brookfield
1995/1995-1998
Michael J. Kryda, MD, Marshfield
1989/1995-1998
Larry M. Ojeda, MD, Beloit
1989/1995-1998
William E. Raduege, MD, Woodruff
1995/1995-1998
Mark A. Timm, MD, Menomonee Falls
1995/1995-1998
Joseph E. Trader, MD, Manitowoc
1989/1995-1998
Laurens D. Young, MD, Milwaukee
1995/1995-1998
Mark H. Andrew, MD, Viroqua
1990/1996-1999
Joseph W. Babiarz, MD, Merrill
1996/1996-1999
Steven K. Dankle, MD, Milwaukee
1990/1996-1999, chair
Carl S.L. Eisenberg, MD, Milwaukee
1996/1996-1999
Jeffrey D. Larsen, MD, River Falls
1997/1997-1999
Robert M. Stern, MD, Milwaukee
1990/1996-1999
Gregory B. Buck, MD, Wauwatosa
1990/1997-2000
John F. Pope, MD, Wauwatosa
1994/1997-2000
Patrick L. Remington, MD, Madison
1993/1997-2000
Evan K. Saunders, MD, Milwaukee
1995/1997-2000
Douglas L. Schulz, MD, Milwaukee
1997/1997-2000
Michael R. Seitzinger, MD, Berlin
1997/1997-2000
Thomas Slota, MD, Milwaukee
1992/1997-2000, vice chair
Sridhar V. Vasudevan, MD, Brookfield
1994/1997-2000
Alice Soule, Madison
WMGMA representative

Staff support: Mike Kirby/Judy Frey

Section Representatives
Allergy Section:
Todd A. Mahr, MD, Onalaska
Anesthesiology Section:
John F. Kreul, MD, Madison
Cardiology Section:
Michael P. Cinquegrani, MD, Milwaukee
Dermatology Section:
Eric R. Berg, MD, Madison
Emergency Medicine Section:
Thomas J. Luetzow, MD, Watertown
Family Physicians Section:
Calvin S. Bruce, MD, Madison
Internal Medicine Section:
Susan L. Turney, MD, Marshfield
International Medical Graduate Section:
Kesavan Kutty, MD, Milwaukee
Neurology Section:
Gamber F. Tegtmeyer, Jr, MD, Madison
Neurosurgery Section:
Mohammed Rafiullah, MD, Racine
Obstetrics-Gynecology Section:
Joel B. Henry, MD, Janesville
Ophthalmology Section:
Jack L. Hughes, MD, Wauwatosa
Orthopaedic Section:
Robert O. Buss, MD, Brookfield
Otolaryngology Section:
Ashley G. Anderson, Jr, MD, Madison
Pathology Section:
Katherine M. Bayliss, MD, Waukesha
Pediatrics Section:
Donald C. Burandt, MD, Beloit
Physical Medicine and Rehabilitation
Section: Keith B. Sperling, MD, Madison
Plastic Surgery Section:
William A. Wood, MD, Madison
Preventive Medicine Section:
Sidney Shindell, MD, Milwaukee
Radiation Oncology Section:
Richard A. Steeves, MD, Madison
Radiology Section:
Timothy T. Flaherty, MD, Neenah
Resident Physicians Section:
Tosha B. Wetterneck, MD, Madison
Surgery Section:
Ronald D. Wenger, MD, Madison
Thoracic Medicine Section:
Pamela A. Wilson, MD, Madison
Young Physicians Section:
Evan K. Saunders, MD, Milwaukee
(Other Section Representatives to be appointed)

Staff support: Mike Kirby/Judy Frey

Health Care Financing and Delivery

This commission shall be concerned with all aspects of health care financing and delivery systems, including managed health care plans, and shall promote an ongoing dialogue with business, industry, labor and, when appropriate, government agencies. It shall also be concerned with access and financing issues for rural and inner-city health.

John A. Frantz, MD, Monroe
1995/1995-1998
Paul G. Harkins, MD, Marshfield
1990/1995-1998
Peter R. Holzhauer, MD, Brookfield
1993/1995-1998
John E. Kraus, MD, Marinette
1995/1995-1998
Richard A. Leer, MD, Marshfield
1995/1995-1998
Kermit L. Newcomer, MD, La Crosse
1987/1995-1998
Harry Prosen, MD, Milwaukee
1994/1995-1998, chair
Jonathan W. Thomas, MD, Green Bay
1995/1995-1998
Richard D. Bradley, MD, Fond du Lac
1997/1997-1999
Edward J. Coleman, MD, Green Bay
1992/1996-1999
Daniel D. Gilman, DO, Milwaukee
1993/1996-1999
Kenneth O. Johnson, MD, Milwaukee
1993/1996-1999
Bradley L. Manning, MD, Madison
1995/1996-1999
John R. Petersen, MD, Wauwatosa
1994/1996-1999
Clyde M. Chumbley, II, MD, Menomonee Falls, 1991/1997-2000
Charles V. Ihle, MD, Eau Claire
1992/1997-2000
Norman J. Schroeder, II, MD, Green Bay
1989/1997-2000
Sidney Shindell, MD, Milwaukee
1994/1997-2000
Gregory A. Shove, MD, Racine
1994/1997-2000
Susan L. Turney, MD, Marshfield
1995/1997-2000, vice chair
Frank H. Urban, MD, Brookfield
1993/1997-2000
Joan Albian, Milwaukee
WMGMA representative

Staff support: Kevin Wymore/Merry Earll

Medical Assistance Technical Advisory Committee (work group)

This advisory group, a subcommittee of the Commission on Health Care Financing and Delivery, was created to work with the Bureau of Health Care Financing on issues of mutual concern regarding the Medicaid program. Issues for the group's consideration include: MA reimbursement, claims issues and the performance of EDS, copayments, MA/HMO's, prior authorizations and other regulatory requirements.

John A. Frantz, MD, Monroe
Daniel D. Gilman, DO, Milwaukee, chair
Marc F. Hansen, MD, Madison
Charles V. Ihle, MD, Eau Claire
Nancy Ness, MD, Mauston
Wayman Parker, MD, Milwaukee
Guenther P. Pohlmann, MD, Milwaukee, vice chair
Sue Straub, Madison
WMGMA representative

Staff support: Kevin Wymore/Merry Earll

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Injury Prevention and Control

This commission shall be concerned with the prevention and control of accidental and intentional injuries. It shall examine and recommend public safety measures for reducing the incidence of untimely injury or death resulting from, but not limited to, gun violence, domestic abuse, transportation accidents, fires, drowning and falls. The commission shall also examine and recommend measures for assuring effective emergency medical systems in Wisconsin.

Stephen W. Hargarten, MD, Milwaukee
1995/1995-1998, chair
Murray L. Katcher, MD, Madison
1997/1997-1998
Susan Kinast-Porter, MD, Monroe
1995/1995-1998, vice chair
William H. Perloff, MD, Madison
1992/1995-1998
Sean T. Benham, MD, Two Rivers
1996/1996-1999
Edward P. Callahan, MD, Janesville
1996/1996-1999
Phiroze L. Hansotia, MD, Marshfield
1992/1996-1999
Jean M. Slane, MD, Wauwatosa
1996/1996-1999
Frederick W. Blancke, MD, Madison
1994/1997-2000
Bernard F. Micke, MD, Madison
1994/1997-2000
Judith D. Pruski, MD, Fond du Lac
1994/1997-2000
Joanne A. Selkurt, MD, Whitehall
1994/1997-2000
Maxine Omdahl, Racine, Alliance

Staff support: Lynn Sherman/Karen Baier

Maternal and Child Health

This commission shall be concerned with all aspects of health in pregnancy, childbirth and children, with special emphasis on the reduction of maternal mortality and the prevention of disease or disability in children.

Sharon Abdul-Rahman, MD, Milwaukee
1997/1997-1998
Fredrik F. Broekhuizen, MD, Whitefish Bay
1995/1995-1998
Paul R. Myers, MD, Neenah
1992/1995-1998
Carolyn Ogland Vukich, MD, Madison
1995/1995-1998
Catherine R. Ryan, MD, La Crosse
1995/1995-1998
Beatriz Somoza, MD, Oxford
1996/1996-1998
Patricia A. Barwig, MD, Milwaukee
1990/1996-1999
Susan C. Fee, MD, Marshfield
1991/1996-1999
Jean Ricci Goodman, MD, Marshfield
1993/1996-1999
Robert J. Jaeger, MD, Stevens Point
1994/1996-1999, vice chair
Cynthia L. Jones-Nosacek, MD, Milwaukee
1993/1996-1999
Timothy J. O'Neil, MD, Columbus
1991/1996-1999, chair
Frederick J. Bartizal, Jr, MD, Neenah
1995/1997-2000
Seth L. Foldy, MD, Milwaukee
1997/1997-2000
Christal Ann Gordon, MD, Whitewater
1997/1997-2000
John E. Inman, MD, Monroe
1991/1997-2000
Jeffrey H. Lamont, MD, Wausau
1994/1997-2000
Sharyl G. Paley, MD, Milwaukee
1997/1997-2000
Colleen O'Connor, Eau Claire, Alliance

Staff support: Kevin Wymore/Merry Earll

Study Committee on Maternal Mortality Survey

Gloria M. Halverson, MD, Waukesha, chair
Perry A. Henderson, MD, Madison
John E. Inman, MD, Monroe
Robert J. Jaeger, MD, Stevens Point
Stanley A. Korducki, MD, Milwaukee
Paul R. Meier, MD, Marshfield
Bernard B. Poeschel, MD, Eau Claire
Herbert F. Sandmire, MD, Green Bay
Walter R. Schwartz, MD, Wauwatosa
Dorothy V. Skye, MD, Rhinelander
Steven D. Stenzel, MD, Eau Claire
E. Howard Theis, MD, Fond du Lac
Dennis Worthington, MD, Milwaukee

Staff support: Kevin Wymore/Merry Earll

Mediation and Peer Review

This commission shall receive, investigate, and seek to resolve differences between physicians and patients or other complaint-ants, or between physicians, on matters relating to quality of care, and professional ethics. When necessary, it shall initiate disciplinary or other action as appropriate, and will serve as the Society's advisory body on matters affecting medical peer review. It shall advise and consult with component societies on issues of peer review, mediation, ethics, and discipline in concert with members of the Board of Directors, will serve as the initial appellate body for peer review and mediation issues that are appealed from local committees of component societies, and coordinate the Statewide Physician Health Program.

Norval E. Bernhardt, MD, Madison
1995/1995-1998
Frederick W. Blancke, MD, Madison
1987/1995-1998
James R. Davidson, MD, Monroe
1995/1995-1998
Kenneth O. Johnson, MD, Milwaukee
1992/1995-1998
Richard D. Sautter, MD, Marshfield
1992/1995-1998
Donald F. Weber, MD, Eau Claire
1992/1995-1998
John B. Weeth, MD, La Crosse
1992/1995-1998
Michael H. Gilman, DO, Milwaukee
1994/1996-1999
Todd R. Hendrickson, MD, Antigo
1996/1996-1999
William J. Henry, MD, Wisconsin Rapids
1996/1996-1999
Martin L. Lobel, MD, Milwaukee
1993/1996-1999
N. Muni Reddy, MD, Wauwatosa
1996/1996-1999
David A. Satchell, MD, Manitowoc
1990/1996-1999, vice chair
Gregory J. Schmeling, MD, Milwaukee
1996/1996-1999
Bruce B. Berry, MD, Milwaukee
1991/1997-2000
Fernando B. Bersalona, MD, Marshfield
1994/1997-2000
Lucille B. Glicklich-Rosenberg, MD, Milwaukee, 1994/1997-2000
Donald R. Gore, MD, Sheboygan
1992/1997-2000, chair
Arthur K. Kennedy, MD, Kenosha
1997/1997-2000
Stephen R. Kreuser, MD, Washburn
1997/1997-2000
William A. Wood, MD, Madison
1994/1997-2000
John E. Woodford, MD, Madison
1992/1997-2000
Virgil L. Sharp, DO, Waterloo
representing the Wisconsin Association of Osteopathic Physicians and Surgeons

Staff support: Anne Bicha/Sonia Porter

Coordinating Council on Physician Impairment

Gerald C. Kempthorne, MD, Spring Green (SMS)
Fred H. Koenecke, Jr, MD, Richland Center (SMS)
Michael M. Miller, MD, Madison (SMS)
Mikki Paterson, Madison, public member (MEB)
Ronald Grossman, MD, River Hills (MEB)
Walter R. Schwartz, MD, Brookfield (MEB)

Staff support: John LaBissoniere/Sonia Porter

Managing Committee, Statewide Physician Health Program

Pauline M. Jackson, MD, La Crosse
Gerald C. Kempthorne, MD, Spring Green
Fred H. Koenecke, Jr, MD, Richland Center
Marvin O. Kolb, MD, Madison
Wesley E. McNeal, MD, Green Bay
Michael M. Miller, MD, Madison
Rebecca D.C. Niehaus, MD, Crandon
Marcia J. S. Richards, MD, Milwaukee

Medical Director, SPHP
David G. Benzer, DO, Waukesha

Staff support: John LaBissoniere/Sonia Porter

Medicaid Medical Audit

Richard M. Carr, MD, Madison
R. Marshall Colburn, MD, Oregon
John A. DeGiovanni, MD, Prairie du Sac
Philip J. Dougherty, MD, Menomonee Falls
Richard W. Edwards, MD, Richland Center
Charles S. Geiger, Jr, MD, West Bend
Gerald C. Kempthorne, MD, Spring Green
D. Mark Lochner, MD, Waupaca
Kevin M. Roley, MD, Madison
David A. Satchell, MD, Manitowoc
Virgil L. Sharp, DO, Waterloo, representing the Wisconsin Association of Osteopathic Physicians and Surgeons
Daniel W. Shea, MD, De Pere
G. John Weir, Jr, MD, Marshfield

Staff support: John LaBissoniere/Sonia Porter

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Medical Liability and Risk Management

This commission shall monitor current risk management developments and examine the range of options to reduce liability exposure.

Joseph C. DiRaimondo, MD, Manitowoc
1990/1995-1998
Sidney E. Johnson, MD, Marshfield
1987/1995-1998
John J. Kelly, MD, Milwaukee
1993/1995-1998
Steven L. Lawrence, MD, Wauwatosa
1989/1995-1998
Daniel W. Shea, MD, DePere
1993/1995-1998
W. Scott Carpenter, MD, Marshfield
1993/1996-1999
Kenneth M. Klatt, MD, Madison
1993/1996-1999
Craig Larson, MD, Milwaukee
1996/1996-1999
Charles W. Schauberger, MD, La Crosse
1993/1996-1999, chair
Steven D. Stenzel, MD, Eau Claire
1995/1996-1999
Kenneth M. Weesner, MD, Marshfield
1997/1997-1999
Katherine M. Abbo, MD, Kenosha
1997/1997-2000
Donald L. Feinsilver, MD, West Allis
1994/1997-2000
Robin B. Stickney, MD, Janesville
1997/1997-2000
Abraham Varghese, MD, Milwaukee
1994/1997-2000
Michael A. Weiner, MD, Madison
1994/1997-2000
Laurens D. Young, MD, Milwaukee
1993/1997-2000
Monika Allison, Fond du Lac, Alliance

Staff support: Anne Bicha/Karen Baier

Medicine and Ethics

This commission shall be concerned with the ethical aspects of medical practice in order to permit discussion of common problems in the total treatment and care of patients; and, to clarify the relationship between ethics and science in medicine.

Donald R. Beaver, DO, Wauwatosa
1992/1995-1998
Kathleen M. Broad, MD, Superior
1995/1995-1998
Steven H. Cohen, MD, Milwaukee
1993/1995-1998
Wm. Michael Cross, MD, Green Bay
1992/1995-1998
Armond H. Start, MD, Madison
1993/1995-1998
Richard J. Thurrell, MD, Madison
1990/1995-1998
Henry M. Waldren, Jr, MD, Oconomowoc
1995/1995-1998
Richard A. Dart, MD, Marshfield
1993/1996-1999
Mary H. Frantz, MD, Monroe
1995/1996-1999
Robert E. Holzgrafe, MD, Waukesha
1995/1996-1999
Charles L. Junkerman, MD, Milwaukee
1990/1996-1999
G. Daniel Miller, MD, Dousman
1996/1996-1999
Jonathan H. Berkoff, MD, Milwaukee
1997/1997-2000
Philip J. Dougherty, MD, Menomonee Falls
1991/1997-2000
William J. Hisgen, MD, Madison
1995/1997-2000, chair
Sharlene P. Kreitlow, MD, Chippewa Falls
1997/1997-2000
William G. Weber, MD, Oshkosh
1991/1997-2000
Linda Roetker, Fond du Lac, Alliance

Staff support: Maria Van Cleve/Karen Butler

Public Information

This commission shall be concerned with the members of this Society and their image with the public. It shall plan and execute programs of effective public information and health education, assist component societies in the conduct of similar programs, develop effective media relations.

Khosro Adib, MD, Madison
1994/1995-1998
Michele L. Bachhuber, MD, Marshfield
1993/1995-1998
Edward G. Kass, MD, Waukesha
1994/1995-1998
Robert E. Phillips, MD, Marshfield
1993/1996-1999, chair
Jeffry J. Young, DO, Green Bay
1993/1996-1999
Clarence P. Chou, MD, Mequon
1991/1997-2000, vice chair
Bradley L. Manning, MD, Madison
1991/1997-2000
Mark K. Stevens, MD, La Crosse
1997/1997-2000
Roberta Baldwin, Watertown, Alliance

Staff support: B-L Pellicore/Michelle Koehler

Wisconsin Medical Journal

The *Wisconsin Medical Journal* shall be the official journal of the Society. An editorial board consisting of the medical editor as chair and no less than six additional members shall be responsible for all scientific, editorial, and business affairs of the Journal. An editorial director, serving as chair of a group of no less than five editorial associates, shall be responsible for regularly providing items of editorial opinion for publication in the editorial pages of the Journal.

Charles C. Canver, MD, Madison
1994/1995-1998
Jeffrey H. Lamont, MD, Wausau
1989/1995-1998
Thomas C. Meyer, MD, Madison
1995/1995-1998, chair and medical editor
Susan F. Behrens, MD, Beloit
1991/1996-1999
Kesavan Kutty, MD, Milwaukee
1994/1996-1999
Charles W. Schauberger, MD, La Crosse
1996/1996-1999
John D. Adolphson, MD, Colby
1996/1997-2000
Joseph N. Blustein, MD, Madison
1997/1997-2000
Benjamin C. Wedro, MD, La Crosse
1993/1997-2000

Staff support: Judith Burke/Michelle Koehler

WNA-SMS Liaison

This commission shall be concerned with developing recommendations, as appropriate, regarding education, legislation, practice arrangements and delivery patterns; shall facilitate understanding and acceptance by the professions and the public of changing medical and nursing relationships, roles and practices; shall serve as a consultation resource in matters that relate to joint practice.

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Arthur E. Angove, DO, Milwaukee
1995/1995-1998
Marc F. Hansen, MD, Madison
1987/1995-1998
Sandra L. Osborn, MD, Verona
1990/1996-1999, co-chair
Paul K. Wegehaupt, MD, Rhinelander
1996/1997-2000

WNA members:
Ann Conway, RN, Madison
Barbara Friedbacher, RN, Brookfield
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Claire Meisenheimer, PhD, RN, Milwaukee
Barbara Nichols, RN, Madison, co-chair

Staff support: Anne Bicha/Karen Baier

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Marvin G. Parker, MD, Racine

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Task Forces

Task Force on Governance Structure

This task force is to study the current governance structure of the State Medical Society and make recommendations for potential change. The study shall include, but not be limited to, the following areas of the Society's structure: (1) the need for House of Delegates and component societies; (2) the basis of representation to election, size and operation of the Board of Directors; (3) the establishment of an SMS governance structure which appropriately represents a membership engaged in the many faceted types of medical practices utilized in various health care delivery areas; (4) the establishment of a process which assures to the greatest extent possible that the SMS governance structure will appropriately evolve to meet the needs of the membership. An interim or final report, if possible, shall be presented to the 1997 House of Delegates.

In addition, the House asked the Task Force on Governance Structure to review the process of election to office within the Society and to review the role of the Nominating Committee, the need (or not) for such a committee, the demographic and historical "understanding" used in selecting candidates for certain offices and make recommendations as warranted.

Sean Benham, MD, Two Rivers
Gregory B. Buck, MD, Wauwatosa
Clarence P. Chou, MD, Mequon
Ali K. Choucair, MD, Marshfield
Richard P. Day, MD, Madison
Lucille Glicklich-Rosenberg,MD, Milwaukee
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Kathleen M. Wick, MD, Beloit

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Kevin T. Flaherty, MD, Wausau

Staff support:
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Kevin Flaherty, MD, speaking with Task Force on Governance Structure members Gregory A. Shove, MD, Bruce Kraus, MD, and Robert Phillips, MD.

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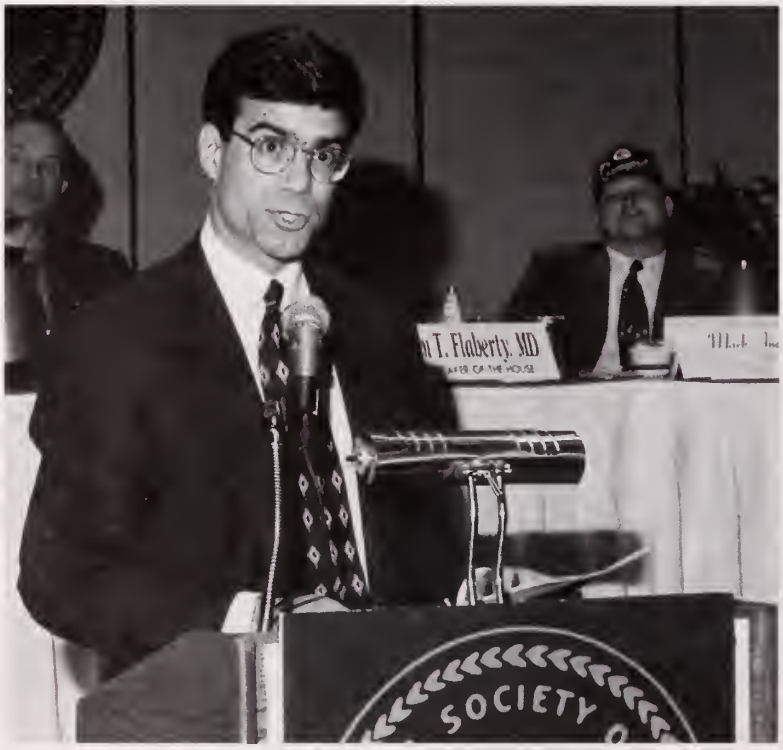

Michael Medich, MD, President of the Brown County Medical Society, addresses the House of Delegates.

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715-682-2358
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608-222-7751
E-mail: cmewcapp@aol.com

Physical Medicine and Rehabilitation

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414-447-2089
VC—Vacancy
ST—Robert M Stern, MD
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Milwaukee 53210
414-447-2089
D—Frank Salvi, MD
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Cottage Grove 53527
608-263-8647
AD—Diane Braza, MD
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Plastic Surgery

C—Paul W Loewenstein, MD
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ST—William A Wood, MD
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Madison 53715
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D—Vacancy
AD—Vacancy

Preventive Medicine

C—Jane K Sliwinski, MD
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Green Bay 54313-8272
414-496-4700
ST—Vacancy
D—Henry A Anderson III, MD
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AD—Jane K Sliwinski, MD

Psychiatry

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CE—Jeffrey P Holmgren, MD
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S—Mary Ann Mikus, DO
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D—Jeffrey P Holmgren, MD
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Radiation Oncology

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VC—Mitchell H Pincus, MD
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Fox Point 53217
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Continued on next page

Continued from preceding page

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608-833-7727
ST—Michael A San Dretto, MD
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Neenah 54956
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Fax--414-722-7454
D—Fred E Klein, MD
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Oshkosh 54904
414-236-3251
AD—Timothy T Flaherty, MD
547 E Wisconsin Ave
Neenah 54956-2966
414-722-1582

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608-273-9392
VC—Jerome A Esser, MD
2221 Hollidale Dr #210
Waukesha 53186
414-798-9338
ST—David Drake, MD
PO Box 340186
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414-645-7529
D—Donald J Frisco, MD
2813 Lordshire Rd
Madison 53719
608-274-9417
AD—Douglas L Schulz, MD
909-G Quinian Dr
Pewaukee 53072
414-649-7909
MLG—Richard A Staehler, MD
3904 Patrick Henry Way
Middleton 53562-1316
608-262-0143
MLG—Kevin L Smith, MD
3178 S 29th St
Milwaukee 53215

Surgery

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608-252-8000
CE—Vacancy
ST—James A Avery, MD
420 E Division St
Fond du Lac 54935
414-929-1655
D—James P Quenan, MD
105 - 4th Ave
PO Box 336
Shell Lake 54871-0336
715-468-2711
AD—Jeffrey A Blink, MD
720 S Van Buren #303
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414-433-9621

Thoracic Medicine

C—Vacancy
ST—Vacancy
D—Edward R Winga, MD
1836 South Avenue
La Crosse 54601
608-782-7300
AD—Vacancy

Urology

C—Vacancy
ST—Michael E Kuglitsch, MD
1 S Park St
Madison 53715-1349
608-287-2900
D—Thomas W Wood, MD
3807 Spring St
Racine 53405
414-631-8011
AD—Randle E Pollard, MD
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414-344-3360

Young Physicians

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608-364-2255
CE—Frank J Salvi, MD
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608-265-3207
D—Edwin Overholt II, MD
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AD—Vacancy
AMAD—Evan K Saunders, MD
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414-649-3313
AMAD—Scott D Beede, MD
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608-782-9760
AMA AD—Christopher Stroud, MD
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Beloit 53511
608-364-2255
AMA AD—Wendy L Larson, MD
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414-454-5200

Officers of Wisconsin Specialty Societies

Key: president (P), president elect (PE), vice president (VP), secretary (S), treasurer (T), secretary-treasurer (ST), secretary-treasurer elect (STE), executive director (ED), executive secretary (ES), chapter administrator (CA). As of 6/1/97.

Wisconsin Allergy Society

P—Marshall E Cusic, Jr, MD
1000 N Oak Ave
Marshfield 54449
715-387-5511

VP—John E Basich, MD
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Hales Corners 53130
414-425-5750

ST—Reid M Olson, MD
2711 Allen Blvd
Middleton 53562
608-831-3666

Wisconsin Society of Anesthesiologists

P—Chris E Humphreys, MD
5575 Graff Road
Eau Claire 54701
715-834-8721

PE—Robert E Kettler, MD
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Wauwatosa 53226-1914
414-257-6269

ST—W Stuart Sykes, MD
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Madison 54701
608-233-2764

Wisconsin Chapter: American College of Cardiology

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S—Charles Canver, MD
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Wisconsin Dermatology Society

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PE—Marcelle Neuburg, MD
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ST—George T Reizner, MD
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Madison 53705
608-263-6230

Wisconsin Chapter: American College of Emergency Physicians

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S—Gary L Swart, MD
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608-831-9110

Wisconsin Academy of Family Physicians

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Wisconsin Society of Internal Medicine

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715-341-1992

ST—Sharon L Haase, MD
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Wisconsin Neurological Society

P—Nancy Spencer, MD
Dept of Neuro Science
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Marshfield 54449
715-387-5998

PE—Vacancy

VP—Vacancy

ST—Piero Antuono, MD
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Wisconsin Section: American College of Obstetrics and Gynecology

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Fax--414-658-2699
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ST—David D Schmitt, MD
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Wisconsin Thoracic Society

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ST—George B Haasler, MD
Div of Cardio Thoracic Surgery
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Milwaukee 53226
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Wisconsin Urological Society

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Milwaukee 53226
414-259-2795

ST—Michael E Kuglitsch, MD
1 S Park St
Madison 53715-1349
608-287-2900

Gerald Govin, MD, at Task Force on Governance Structure Town Hall meeting.

Expense Reimbursement Policy and Procedure for Physicians on SMS Business

It is SMS policy to offer reimbursement of out-of-pocket expenses incurred by its officers, directors, speaker, vice-speaker, committee chairs and members, AMA delegates and alternates and other designated physicians when such expenses are incurred in the course of the conduct of business on behalf of the society. Out-of-pocket expenses in the discharge of official functions of the society are reimbursable as set forth below, except that district directors are not reimbursed for the expense of attending the annual meeting of the society (Bylaws, Chapter V, Sec 4).

Officers, Directors, Committee Chairs and Members, and Other Designated Persons

Reimbursable expenses include the cost of:

- All meals, including normal tips, incurred while away from the physician's home city on SMS business.
- All meals in the home city of the physician when these are in relation to an SMS business meeting.
- Entertainment expenses where such expense is clearly a proper and necessary adjunct to the conduct of the physician's business function for the society.
- Valet and laundry services when the physician is away from home city on SMS business continuously for 4 days or more.
- Lodging for those days (nights) reasonably associated with the dates of a meeting for which expenses are claimed.
- Transportation from home city to meeting site and return as follows:
  Air. Cost of round trip coach airfare, plus necessary ground transportation.
  Bus or train. Cost of round trip fare, plus necessary ground transportation.
  Auto. Mileage at the current IRS rate to and from the meeting site, plus necessary parking fees and highway tolls.
  Miscellaneous ground transportation. Local bus and cab fares as necessary.
  Auto rental. All or some portion of such cost may be reimbursed as a substitute for other ground transport when this is the most feasible alternative following initial air, bus or train travel.
- Telephone, fax and telegraph communications relative to SMS business.
- Secretarial and copying services, postage and stationary used for SMS business. (Note: SMS headquarters is prepared to handle most official correspondence and reproduction work for officers and committee members.) Physicians may be reimbursed, however, for personal or office costs relating to secretarial, copying, postage and stationery used in conducting SMS business. Copies of all official correspondence should be sent to the appropriate committee staff person at SMS, so as to assure proper coordination and record-keeping.
- Expenses, as described above, incurred by the president's and president elect's spouses when accompanying in an official capacity, or when the spouse is expected to be in attendance, are reimbursable.

Procedure for Claiming Expenses

To obtain reimbursement, submit a statement of expenses incurred within ninety (90) days from the date the expenses were incurred. Attach copies of bills or receipts for all lodging, travel, and meals over $25. Itemize separately costs for the eighth item above. Mail to SMS Business Services and Support, PO Box 1109, Madison, WI 53701. Reimbursement will be made within two weeks following receipt and approval of the expense report. Expense statements received after the 90-day period will not be reimbursed.

In 1995, the House of Delegates authorized the payment of expenses for resident and student delegates and alternate delegates to attend the annual meeting as approved by the Board.

AMA Delegates and Alternates

AMA delegates and alternates (including the young physicians delegate and alternate) from Wisconsin receive reimbursement as follows for each meeting to the AMA House of Delegates they attend:

- Round trip economy air fare (advance booking strongly suggested.)
- Actual cost of room (mid-range) for 5 nights at the annual meeting, and 4 nights at the interim meeting.
- A per diem (currently $60) for food and all incidentals for 6 days at the annual meeting, and 5 days at the interim meeting.
- When AMA delegates and alternates are conducting SMS business not in conjunction with meetings of the AMA House of Delegates, their expenses may be reimbursed in the same manner as outlined for officers and directors.

Out-of-State Trips

To receive reimbursement for out of state travel members must have prior approval by the Chairman of the Board of Directors and the Executive Vice President. Travel to the AMA House of Delegates meetings by the above mentioned and travel by the SMS President and President Elect are exempt from this policy.

SMS Financial Report

The following financial statements of the State Medical Society of Wisconsin are part of the treasurer's report to the House of Delegates. The annual certified audit, prepared by Grant Thornton, independent certified public accountants, is on file at Society headquarters. Members may review the audit by inquiry to the SMS executive vice president.

Balance Sheet

Dec 31, 1996

Assets	
Current assets	
Cash and cash equivalents	$ 3,334,051
Investments	953,683
Current portion notes receivable	1,627,347
Accounts receivable	
Trade	29,960
Due from affiliates	152,153
Accrued investment income	79,316
Prepaid expenses	47,432
Total current assets	$ 6,223,942
Property and equipment-at cost	
Building and equipment	$ 2,566,651
Furniture and equipment	1,620,208
Less accumulated depreciation	(2,353,956)
Land	69,891
Total property and equipment	$ 1,902,794
Other assets	
Long-term investment	249,000
Investment in subsidiary	(63,601)
Deferred compensation plan assets	723,970
Notes receivable, less current portion	1,018,231
Total other assets	$ 1,927,600
Total Assets	$ 10,054,336
Liabilities	
Current liabilities	
Current maturities of long-term debt	$ 128,038
Trade accounts payable	130,163
Dues payable to other organizations	858,688
Accrued payroll and vacation pay	99,279
Accrued property, payroll and sales taxes	132,160
Deferred revenues	2,898,716
Accrued health plan costs	36,615
Other	42,393
Total current liabilities	$ 4,326,052
Long-term debt less current maturities	$ 331,976
Deferred compensation payable	$ 727,355
Accrued Pension Costs	$ 397,674
Membership equity	$ 4,271,279
Total Liabilities and Membership Equity	$ 10,054,336

Statement of Income and Expenses Year ended Dec 31, 1996

Income	
Membership dues	$ 3,904,891
Sales and services	1,192,118
Investment	269,052
Royalties	292,945
Gain on investments and assets	1,185,095
Rental	159,489
Grants	11,665
Total Income	$ 7,015,255
Expenses	
Payroll and employee benefits	$ 3,070,365
Travel and conference	557,108
General administrative	1,311,640
Occupancy	289,376
Professional fees and outside services	353,741
Interest	42,177
Pension amortization	191,881
Other	50
Total Expenses	$ 5,816,338
Excess income over expenses	$ 1,198,917
Equity at Jan 1, 1996	$ 3,148,949
Equity in loss of subsidiaries	$ (76,587)
Equity at Dec 31, 1996	$ 4,271,279

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Statewide Physician Health Program

The Statewide Physician Health Program (SPHP) provides compassionate assistance to Wisconsin physicians suffering from any condition that has the potential to progress to impairment. These conditions include chemical dependency, psychiatric illness, senility, compulsive gambling, behavioral disorders, and physical impairment. The Statewide Program Managing Committee establishes policies and implements program activities. As a subcommittee of the Commission on Mediation and Peer Review, the Managing Committee and its activities are protected by way of confidentiality and immunity under state and federal law.

SPHP offers education, identification, assessment and compassionate intervention. Physicians are referred to acceptable facilities for evaluation or treatment and monitored for a minimum of two years after completion of initial therapy. The SPHP Medical Director provides continuous program leadership, conducts physician interventions and is available to Wisconsin physicians and hospitals to offer counsel regarding local problems.

Any responsible person concerned that a physician may suffer from impairment may call the SMS; strict confidentiality is assured. Staff receiving information consult with the SPHP Medical Director for guidance and early action. All information, including corroborative evidence, is evaluated for accuracy. When it is determined that a potential problem exists, intervention is arranged.

Phase I: Education and Prevention

Target individuals and groups receive education to learn symptoms of physician impairment, techniques of early identification and prevention, resources available for intervention, assessment and/or treatment and other problems associated with impairment. The SPHP Medical Director and Associate Medical Director present educational and prevention programs to the following target groups:

- *Physicians:* Meetings of hospital medical staffs, county medical societies, statewide continuing medical education, accredited seminars, and presentations to faculty and students in Wisconsin's medical schools.
- *Hospital Personnel:* Hospital administrators and medical directors, chiefs of medical staffs and others. Consultation with medical staff officers on establishing effective physician health committees or programs in hospitals. "Guidelines for Physician Aid Committees of Hospital Medical Staffs" has been distributed to all Wisconsin general hospitals.
- *Pharmacists and nurses:* Lectures at meetings or in combination with physician and hospital personnel.

Phase II: Intervention, Assessment and Treatment

Successful programs include the availability of physician interveners to undertake compassionate contact with physicians identified as possibly impaired. The SPHP Medical Director or other trained physicians are available to meet with and urge impaired colleagues to enter suitable facilities for evaluation, treatment or both. Programs or facilities considered suitable are those that comply with Statewide Physician Health Program requirements.

The initial intervention is always a compassionate encounter. A punitive or coercive approach is never considered until all benevolent measures have been exhausted. An intervener's continuing concern is the professional and personal well-being of a colleague and the quality of health care for patients.

Physicians suffering from chemical dependency achieve a more satisfactory recovery status when they receive intensive treatment in facilities which espouse the medical model of therapy, under which the physician is seen by the physician addiction specialist on a frequent, if not daily, basis. Within this model, SPHP maintains certain requirements for satisfactory primary treatment for chemical dependency.

Physicians suffering from emotional illness or senility, or from the sequelae of stress when these are uncomplicated by chemical dependency, are encouraged to seek assessment, treatment, or both through Statewide Program approved facilities or practitioners.

SPHP adheres to the policy that satisfactory recovery can only be realized through a monitored two-year recovery period. It considers the two years after initial treatment to be vital to assuring continued recovery.

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Phase III: Benevolent Assistance

In addition to the burden of impairment, some physicians are financially unable to pay the cost of treatment. By estimate, 10 percent of Wisconsin impaired physicians have either no or inadequate health insurance. For 60 percent of chemically-dependent physicians, residence in treatment and recovery homes is essential for completion of the two-year recovery program.

With SMS and SMS Foundation Board approvals, SPHP established a Physicians Benevolent Assistance Fund to provide low-interest loans to assist physicians with payment of in-patient and out-patient services. Loans are repayable after return to medical practice.

Phase IV: Protecting the Public

SPHP maintains formal linkage with the Wisconsin Medical Examining Board (MEB) through the Coordinating Council on Physician Impairment, which consists of three SMS members and three MEB members. The Council coordinates activities so that appropriate information is shared and the Council can take action in the event a physician fails to respond to treatment or refuses to enter rehabilitation. By majority vote, the Council may refer a physician to the MEB in the rare instance where the health of the public may be jeopardized.

The Coordinating Council presents a desirable balance of concerns and interest between the voluntary assistance program of the SMS and the Wisconsin statutory licensing and disciplinary body. Thus, the Council is an appropriate step in the reporting process if necessary during attempts at physician rehabilitation where difficulty may be encountered. ❖

Mediation and Peer Review Services

When misunderstandings arise about what the physician hopes to accomplish and what the patient expects, it is important that the patient discuss with the physician any questions about the medical care received. If they are not clarified, however, the SMS provides a means for resolving these differences.

The SMS Commission on Mediation and Peer Review receives, investigates, and resolves complaints and inquiries from patients and others, concerning Wisconsin physicians. The commission's standard of judgment is what constitutes good medical care. Physicians, too, may benefit from commission efforts to mediate differences between themselves.

Many complaints and questions received by SMS staff are handled by telephone. By protocol, only written complaints will be considered by the commission. If all affected parties reside within the boundaries of a single county medical society, that society may assume jurisdiction of the complaint. If it does, the complaint will be transferred to the CMS for investigation and resolution.

A protocol manual was developed by the Commission on Mediation and Peer Review and approved by the Board of Directors for conducting resolution of patient complaints, employing peer review mechanisms to test physician practice patterns, and responding to inquiries or requests for action regarding impaired physicians. The manual was designed to accommodate informal disposition of minor and uncomplicated complaints, as well as complex and serious matters which may involve due process, patient or physician appeals, proposed disciplinary actions, and Board of Directors consideration of a physician's SMS membership. The manual is available upon request.

Certain complaints received by the commission are evaluated by subcommittees, members of which submit reports and

recommended resolutions to the commission chair. Frequently, these subcommittee conclusions are transmitted to the subject physicians, and as appropriate, to complainants. All subcommittee activities are reported to the commission.

The Commission on Mediation and Peer Review offers peer review services to private and governmental organizations and to physicians, including utilization review (as it relates to quality-of-care issues), appropriateness of patient care, and quality assurance.

Although it is empowered to initiate disciplinary action, the commission's most valuable peer review benefits have been educational, judging from physicians' expressed appreciation for the commission's consultation in matters of proper patient care.

The commission maintains purview over the Statewide Physician Health Program and continues its interest in the Coordinating Council on Physician Impairment of the SMS and the Medical Examining Board. The commission participates in the Medicaid Medical Audit Committee, under contract between the SMS and the Wisconsin Department of Health and Family Services.

Commission members will also review cases submitted by physicians who are the subject of Medicare or Medicaid reviews, to provide an independent assessment of the appropriateness of care provided. In those instances where the commission disagrees with a review organization finding, the commission will provide the physician with independent medical opinion in any further action taken by the review agencies.❖

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Legal Decision Update, 1996-1997

The following is a synopsis of legal cases of potential importance for physicians decided by the Supreme Court of the United States, the Wisconsin Supreme Court, and the Wisconsin Court of Appeals during 1996 and early 1997.

Medical Examining Board Decision Requirements

Gimenez v. Wisconsin Medical Examining Board., 203 Wis. 2d 349 (Ct. App. 1996).

The Wisconsin Medical Examining Board initiated proceedings against Dr Gimenez for endangering the health of his patients, specifically four patients who suffered from diseases including infected appendix, cancer of bladder, cancer of colon, and cardiovascular problems. The Board found Dr Gimenez violated the statute that prohibits physicians from engaging in conduct which threatens the health and safety of their patients.

Doctor Gimenez appealed the Board's decision, and the circuit court ruled that the Board's decision was "arbitrary" and not sustained by the record.

The Wisconsin Court of Appeals decided that if the Wisconsin Medical Examining Board finds a physician has endangered the health of his or her patients, the Board must provide a plain and thorough written decision that separately identifies five elements. The five elements require the Board to specify (1) the course of treatment the physician provided; (2) the minimum standards of treatment; (3) how the physician's treatment deviated from the standards; (4) how the treatment created an unacceptable level of risk; and (5) what course of treatment a minimally competent physician would have taken.

The appellate court rejected the Board's position that its 18 page-written decision satisfied the five elements when taken as whole. The court rejected this position because only one page "identified the reasons why it believed that Dr Gimenez had endangered the health and safety of these patients."

Instead, the court explained that requiring a more detailed written decision enables the court to satisfy the purpose of judicial review of administrative hearings, namely, to determine whether a physician has suffered from arbitrary, unreasonable, or oppressive conduct by the Board. This is especially important since the court lacks expertise in medical matters. **The court cautioned that the Board needs to carefully outline every aspect of why it reached its stated conclusions.**

While the appellate court rejected the Board's position, the appellate court disagreed with the circuit court's decision to dismiss the entire investigation because of the Board's failure to fully document its reasoning. Accordingly, the appellate court remanded the case to the circuit court with directions that it remand the case to the Board and direct the Board to reconsider the charges against Dr Gimenez.

Triggering the Statute of Limitations in Medical Malpractice - The Discovery Rule

Claypool v. Levin. No. 94-2457, filed May 9, 1997.

This case is about establishing when the patient discovered her injury and therefore triggered the running of the statute of limitations.

Claypool entered the hospital on March 6, 1989, suffering from vision problems. Doctor Levin treated Claypool from March 7 until April 6, 1989, at which time she was released from the hospital and was totally blind. Four days after leaving the hospital, Claypool and her husband retained an attorney to investigate whether her blindness was attributable to Dr Levin. The attorney obtained several pages of her hospital records, but failed to have them reviewed by an expert. In 1992, counsel advised Claypool that a physician had advised him that there was no cause of action against Dr Levin. In 1993, the Claypools contacted a different attorney who advised her that she did have a viable medical malpractice claim against Dr Levin. On October 14, 1993, the patient brought a suit against Dr Levin, more than four-and-one-half-years after Dr Levin last treated Claypool.

Doctor Levin moved for summary judgment based on the statute of limitations. The statute of limitations provides that claims against health care providers must be brought within three years from the date of injury or within one year from the date that the injury was discovered or in the exercise of reasonable diligence the injury

Triggering the Statute of Limitations in Medical Malpractice - The Discovery Rule

(Continued)

should have been discovered.

The Wisconsin Supreme Court explained that **discovery occurs when the plaintiff/patient has information that would constitute a basis for an objective belief of her injury and its cause. In other words, discovery occurs when a potential plaintiff has information that would give a reasonable person notice of her injury and its cause.** As to whether Claypool's claim was time barred, the court stated that **while an unsubstantiated lay belief is not sufficient for discovery to occur, the existence of a reasonable likelihood for an objective belief as to an injury and its cause does not require any sort of formalistic approach. It does not matter whether her objective belief resulted from information "officially" obtained from an expert witness. Nor does it necessarily always matter whether the objective belief resulted at all from information obtained from any "expert" person.** Based on this standard, the Wisconsin Supreme court ruled that her claim is barred by the statute of limitations because she discovered or should have discovered her injury in March or April 1989 but filed in 1993, thereby, exceeding the three-year statutory time limit.

In reaching its conclusions, the court explained that the Claypool's knew of the potentially responsible health care providers immediately after the injury, and that they retained counsel within weeks of the injury to conduct an investigation regarding the potential cause or causes of the injury. In addition, the court decided that the question of when the patient's discovery should have occurred does not hinge on the actions of her attorney in evaluating the case. Furthermore, a valid legal opinion is not necessary for discovery to occur.

Goff v. Seldera, No. 95-0135, 95-1013, filed May 29, 1996, unpublished.

In another statute of limitations case, the Wisconsin Court of Appeals held the date the patient should have discovered her injury was a question of fact for the jury to decide. On October 5, 1987, Dr Seldera performed an exploratory laparotomy on Goff, during which the physician took a tissue sample that was determined by a hospital pathologist to be cancerous. The physician informed Goff's parents of the ovarian cancer and asked for and received from Goff's parents consent to perform a complete hysterectomy.The tissue sample was retested by another pathologist, and on October 29, 1987, Goff was informed that the retest revealed only a "borderline malignancy." Follow-up visits and tests of Goff's tissue sample from 1988 to 1991 came back negative.

In January 1991, Goff became aware of the number of hysterectomies that are performed unnecessarily and obtained her medical records in June 1991; she retained an attorney in July 1991. Counsel had medical experts review Goff's records and an expert's report criticized how Dr Seldera treated Goff's condition. Goff brought a suit against Dr Seldera on the basis of negligence and lack of informed consent in June 1992.

Dr Seldera sought to dismiss the suit claiming that Goff discovered her injury in October 1987, when the test of her tissue sample came back "borderline malignancy," but waited until June 1992 to file her claim, thereby, exceeding the three year statute of limitations. Dr Seldera also argued that Goff's doubts about the necessity of the hysterectomy during her ongoing treatment from 1988 to 1991 triggered the running of the statute. Goff argued that she triggered the running of the statute of limitations in July 1991, when the medical expert opinion criticized how Dr Seldera treated her condition. And by filing her claim in June 1992, she was within the statute's requirement that she bring her suit within one year from the date the injury was discovered. The trial court denied Dr. Seldera's motion to dismiss. The Wisconsin Court of Appeals affirmed the trial court's decision, ruling that **reasonable minds could differ as to when along this time line the patient should be held to have discovered her injury, or should have known through the exercise of reasonable diligence of her injury.** Thus, it is up to the jury to decide when Goff's doubts ripened into discovery.

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Psychotherapist/ Patient Confidential Communication

Jaffee v. Redmond, 116 S. Ct. 1923 (1996)

In this case, Redmond, a police officer, shot and killed Allen, whom Redmond believed was brandishing a knife and was about to stab a man he was chasing. Jaffee, the administrator of the Allen's estate, filed a complaint seeking damages for violation of Allen's constitutional rights and the Illinois wrongful death statute.

A licensed clinical social worker counseled Redmond after the shooting. Redmond and the social worker refused to comply with the district court's order to disclose the contents of the counseling notes to Jaffee. At the end of the trial, the judge advised the jury that the refusal to turn over the notes had no "legal justification" and that the jury could therefore presume that the contents of the notes would have been unfavorable to Redmond. The jury ruled in favor of Jaffee.

However, the Court of Appeals for the Seventh Circuit reversed and remanded the case for a new trial, concluding that reason and experience, the touchstones for acceptance of a privilege under the Federal Rules of Evidence, compelled recognition of a psychotherapist patient privilege. The US Supreme Court affirmed the decision of the Court of Appeals for the Seventh Circuit holding that **confidential communications between a licensed psychotherapist and her patients in the course of diagnosis or treatment are protected from compelled disclosure under the Federal Rules of Evidence and thus created a new Federal privilege.** The Supreme Court reasoned that the **psychotherapist/patient privilege is rooted in the imperative need for confidence and trust. Furthermore, the mere possibility of disclosure may impede the development of the confidential relationship necessary for successful treatment. And to make the promise of confidentiality contingent upon a trial judge's later evaluation of the relative importance of the patient's interest in privacy and the evidentiary need for disclosure would eviscerate the effectiveness of the privilege.** Note: This is a case that recognizes a psychotherapist/patient privilege in federal courts. A privilege in state courts already exists.

State v. Joseph, 200 Wis. 2d 227 (Ct.App. 1996)

This case involves the psychologist/patient privilege between a Department of Corrections' psychologist and inmate. The State brought a Termination of Parental Right (TPR) action against Joseph based on sexual assaults he committed against his two daughters. Joseph was treated by two psychologists at the correctional institution. The trial court allowed their testimony, despite Joseph's contention that the psychologist/patient communication privilege excludes this type of testimony. The trial court, however, rejected Joseph's argument stating that the court had ordered Joseph to visit the psychologists, and thus, the communications fell within an exception to the general privilege rule. Joseph argued that no such order existed and renewed his objection. The State argued that no privilege existed because the communication occurred as part of the Department of Corrections' (DOC) procedures.The privilege statute provides that **a patient may prevent disclosure of confidential communications made to psychologist for purposes of diagnosis or treatment.** The statute also defines **confidential communication as one not intended to be disclosed to 3rd persons other than those present to further the interest of the patient.**

Joseph showed that he had an objectively reasonable belief that the discussion was confidential and made for the purpose of diagnosis or treatment since the psychologist informed Joseph that what he told her would be used for his treatment while he was in the system. In addition, Joseph showed that the communication did not fall within the exception to the general privilege rule because his visits with his psychologist were not ordered by the court. The appellate court held that Joseph's discussion with his psychologist was confidential and therefore excluded the psychologist's testimony.

Adult Children's Claim for Emotional Distress

Ziulkowski v. Nierengarten, No. 95-1708, filed April 8, 1997, unpublished.

Ziulkowski allegedly died as a result of negligence of Dr Nierengarten. Ziulkowski's *adult* children sought damages for mental anguish and emotional distress as a result of observing their mother suffering, allegedly caused by Dr Neirengarten's failure to properly care for and treat Ziulkowski. The adult children argued that existing case law recognizes such a claim.

However, the trial court rejected this argument, pointing out that the case to which the adult children referred did not involve medical malpractice but rather a claim filed by a mother who witnessed her son's fatal bicycle-automobile injury. Dr Nierengarten argued that the medical malpractice statute does not provide a cause of action for adult children. The statute provides that individual claimants are **the patient or the patient's representative having a claim or any spouse, parent or child of the patient having a derivative claim for injury or death on account of malpractice.** The court concluded that while the statutes do not specify whether "child" means adult or minor children, current case law addressing medical malpractice cases limits recovery to minor children. Thus, the appellate court affirmed the trial court's decision to dismiss the case because **existing case law and the medical malpractice statutes do not articulate a cause of action for negligent infliction of emotional distress for adult children.**

Bad Faith Claim Against a Medical Director

McEvoy v. GHC Eau-Claire, No. 96-0908, filed December 17, 1996, unpublished, *cert. granted.*

GHC's medical director decided to discontinue coverage for McEvoy who was admitted to the University of Minnesota Hospital for anorexia, after the director had granted several extensions totaling six weeks of treatment. McEvoy was discharged from the hospital and relapsed during outpatient treatment. McEvoy brought her lawsuit against GHC on grounds of bad faith.

The court dismissed her suit because it held McEvoy's complaint stated a claim in medical malpractice and, therefore, was subject to relevant statutory procedures. On appeal, McEvoy argued that the complaint alleged a bad faith claim because GHC's medical director denied payment for inpatient treatment, whereas GHC asserted that the medical director's treatment decisions were medical and, therefore, governed by the medical malpractice statute. The appellate court rejected GHC's argument and reversed the trial court's decision and remanded the case for further proceedings. In finding for McEvoy, the appellate court ruled that **because the medical director has a medical background does not mean that any and all legal challenges to his insurance coverage decisions constitute medical malpractice claims.** Instead, the appellate court relied on the medical director's dealings with the University and found that the decision to deny payment for inpatient treatment was based **not on his medical treatment of McEvoy, but rather on the medical director's administrative and case management roles.** That the medical director functioned in an administrative capacity rather than a medical one was evidenced by: (1) the director's notes, in which he wrote that GHC would not pay for treatment if McEvoy remained in the hospital; (2) the medical director neither met nor treated the patient; and (3) the patient was treated by physicians at the University of Minnesota Hospital and Systems Counseling, and not by GHC physicians. On February 18, 1997, the Wisconsin Supreme Court decided to review this case.

SMS Physician Support Program

The SMS Commission on Medical Liability and Risk Management created the Physician Support Program in 1987 to help physicians and their families cope with the stress of being sued for malpractice. The program provides emotional support, practical information, and an opportunity for the physician and spouse to share their feelings with sympathetic listeners.

How the Program Works

When a physician is sued for medical malpractice, the SMS sends member physicians a packet of materials that includes a letter explaining the Physician Support Program, advice on coping with the experience, and a list of physicians and spouses who have volunteered to serve as members of a special support group. The packet also contains a description of the Medical Mediation Panel System and helpful materials for the physician's spouse. Non-members are sent a letter informing them of the program and to contact the SMS for a packet.

The Physician Support Group

The purpose of the support group is to offer emotional support and practical advice for dealing with a medical malpractice suit. The emphasis is on personal contact and communication between the physician or spouse requesting help and the panel member. The setting of meetings is left entirely to the parties involved, and may be limited to telephone calls, if desired. Topics covered during meetings are expected to be wide ranging, (eg feelings of hostility, fear, loss of confidence, difficulty in making decisions, and withdrawal from the family) but discussions of the specific merits of the case are avoided. The emphasis is on individual interaction and open and frank discussions. There are no group sessions. Confidentiality is assured in all cases.

Any practicing physician who has been a respondent in a malpractice action and feels he or she can offer emotional support to a colleague in a similar situation is encouraged to volunteer as a support group member. Spouses who can provide support for their counterparts are also invited to participate. Each panelist receives basic information about the program and advice on how to be an effective participant.

Physicians interested in providing peer support through the Physician Support Program should contact Anne Bicha at the SMS.❖

Letter to Physician Named in a Medical Mediation Case

Items mentioned in this letter as "enclosed" are available from Anne Bicha at SMS, ext. 237 or via e-mail at: ANNEB@smswi.org.

Dear Doctor:

According to our records, you have been named in a medical mediation case. Feelings such as anger, frustration and depression are common for physicians involved in a malpractice action. I am writing this letter to inform you that there are other physicians and spouses who have been through similar experiences and are willing to discuss those feelings.

As part of the work of the State Medical Society Commission on Medical Liability and Risk Management, we have looked at the effect of the medical malpractice action on the physician and his or her family. It was the recommendation of the Commission on Medical Liability and Risk Management to the Board of Directors that the State Medical Society establish a support structure for physicians and their families involved in professional liability actions. Part of our proposal recommended the establishment of a group of physicians and spouses who could serve as "sympathetic listeners" for the physicians and their families involved in a liability action.

I invite you and your spouse or significant other to utilize the program. The SMS Alliance strongly supported the creation of the support group since it would be very beneficial to family members. Enclosed is a list of physicians and spouses who have volunteered to serve. Please feel free to contact any individual on the list. He or she will assure you of maintaining confidentiality.

Also, enclosed is a brief description of the program for you and your spouse, or significant other, and helpful materials to cope with the stress associated with medical litigation. Remember, talking to an experienced, knowledgeable peer about your frustrations is important. If you have questions about the program, please feel free to contact Anne Bicha at SMS, 800-362-9080 or (608) 257-6781.

Sincerely,

Charles W. Schauberger, MD
Chair, Commission on Medical
Liability and Risk Management

Health Care Legislation Update

Bill Number	Summary	Status	SMS Position
AB 15 (Ladwig)	Mandatory insurance coverage for breast reconstruction incident to mastectomy	Referred to Committee on Mandates	Support
AB 32/SB 27 (Boyle/Risser)	Allow physicians to provide qualified patients with an aid-in-dying	Public hearing held by Assembly Health Committee	Oppose
AB 76/SB 99 (Carpenter/ Clausing)	Mandate coverage of preventive pediatric services Committee on Finance	Passage recommended by Senate Health Committee; referred to Joint	Support
AB 85/SB 65 (Urban/ Rosenzweig)	Requires the sale of a trigger lock with the sale of a firearm	Referred to Assembly Committee on State Affairs	Support
AB 98 (Robson)	Length of hospital stay after mastectomy	Referred to Assembly Committee on Mandates	Support
AB 157 (Wasserman)	Prohibit insurers from requesting genetic test information from health care providers	Public hearing held by Assembly Committee on Consumer Affairs	Support
AB 174/SB 156 (Ourada/Moen)	Licensure of physician assistants; dependent prescribing privileges	Passed Assembly	Support
AB 179 (F. Lasee)	Allow technicians to harvest tissue under physician direction and supervision	Public hearing held by Assembly Committee on Health	Support
AB 220/SB 131 (Goetsch/ Fitzgerald)	Make performance of partial birth abortion a Class A felony; life imprisonment for physicians who perform partial birth abortions	Passed Assembly; referred to Senate Committee on Judiciary	Oppose
AB 248/SB 145 (Green/Breske)	Raise attachment point for Patients Compensation Fund coverage	Passed Assembly; referred to Senate Committee on Organization	Support
AB 280/SB 159 (Wasserman/ Rosenzweig)	Disclosure of HIV test results by attending physician to state epidemiologist	Public hearing held by Assembly Committee on Health	Support
AB 309 (Wasserman)	Require bike helmets for riders aged 16 and under	Public hearing held by Assembly Committee on Urban and Local Affairs	Support
AB 349 (Underheim)	Voluntary participation in the Patients Compensation Fund	Referred to Assembly Committee on Government Operations	Oppose
AB 381 (Underheim)	Modify grounds for investigation by the Medical Examining Board of physicians practicing alternative medicine	Referred to Assembly Committee on Health	Oppose
AB 382 (Underheim)	Create podiatric-affiliated credentialing board	Referred to Assembly Committee on Health	Oppose
SB 63 (Risser)	Prohibit the sale of tobacco in vending machines	Public hearing held by Senate Committee on Health	Support
SB 75 (Adelman)	Lower the blood alcohol level to .08	Public hearing held by Senate Committee on Judiciary	Support
SB 148/AB 390 (Clausing/Plouff)	Repeal caps on noneconomic damages loss of society and companionship in wrongful death cases	Public hearing held by Senate Committee on Judiciary	Oppose

Accreditation Program for Continuing Medical Education

The SMS's accreditation program functions under the authority of the Accreditation Council for Continuing Medical Education (ACCME). Representatives from the American Board of Medical Specialties, American Medical Association, Association for Hospital Medical Education, Association of American Medical Colleges, American Hospital Association, Federation of State Medical Boards, and the Council of Medical Specialty Societies comprise the ACCME.

The SMS Commission on Continuing Medical Education currently reviews and accredits 55 hospitals, 14 specialty societies, three professional organizations, and two county medical societies in Wisconsin. Information is available from Kristin Bjurstrom Krueger, CMP or Lisa Lawry at the SMS.

Category 1:

Category 1 CME designated by an accredited sponsor must meet the following requirements:

- be sponsored by an organization accredited for continuing medical education by one of the state medical associations or by the Accreditation Council for Continuing Medical Education (ACCME), and
- be designated as AMA PRA Category 1 education by that organization.

Category 1 activities can take the form of lectures, seminars, self-assessment programs, mini-residencies, and use of audio-visual or computer-based materials, so long as they are designated as AMA PRA Category 1.

Category 2: All Other CME Activities

In December 1995, Category 2 was defined as all educational activities not designated Category 1, that 1) comply with the AMA definition of CME, 2) comply with AMA ethical opinions on Gifts to Physicians from Industry and on Ethical Issues in CME, and 3) a physician finds to be a worthwhile learning experience related to his/her practice.

Sponsor-Designated AMA PRA Category 2

Accredited sponsors may designate conferences and workshops as AMA PRA Category 2, in accordance with the requirements in Part II. Sponsors are not required to record and maintain attendance information.

Physician-Designated AMA PRA Category 2

Learning experiences that are not designated Category 1 and are not included in the reading requirement can be claimed for Category 2 hours, including:

- consultation with peers and medical experts,
- developing and reviewing quality assessment data,
- use of electronic databases in patient care,
- use of enduring materials,
- small group discussions,
- self-assessment activities,
- journal club activities not designated AMA PRA Category 1,
- teaching health professionals,
- medical writing,
- teleconferences,
- preceptorships, and
- lectures, seminars, and workshops not designated for credit.

Non-Supervised Personal Learning Activities

- Clinical consultations that contribute to a physician's education.
- Informal educational consultations about a patient can be reported; these hours should be estimated and reported in hour blocks.
- Participation in patient care review activities.
- Teaching of medical and other health care professionals.
- Patient-centered discussions with colleagues.
- Journal club activities.
- Use of self-assessment examinations and reviews.

The following Wisconsin organizations were accredited by SMS and ACCME for continuing medical education programming as of June 1, 1997:

Accredited Hospitals

Bellin Memorial Hospital, Green Bay
Beloit Memorial Hospital, Beloit
Berlin Memorial Hospital, Berlin
Children's Hospital of Wisconsin, Milwaukee
Columbia Hospital, Milwaukee
Community Memorial Hospital, Menomonee Falls
Fort Atkinson Memorial Hospital, Fort Atkinson
Gundersen Medical Foundation, Ltd and La Crosse Lutheran Hospital, La Crosse
Hartford Memorial Hospital, Hartford
Howard Young Medical Center, Woodruff
Kenosha Hospital and Medical Center, Kenosha
Lakeland Medical Center, Elkhorn
Langlade Memorial Hospital, Antigo
Luther Hospital, Eau Claire
Memorial Hospital of Iowa County, Dodgeville
Memorial Hospital at Oconomowoc, Oconomowoc
Mendota Mental Health Institute, Madison
Mercy Health System, Janesville
Mercy Medical Center, Oshkosh
Meriter Hospital, Madison
Reedsburg Memorial Hospital, Reedsburg
Ripon Memorial Hospital, Ripon
Riverside Medical Center, Waupaca
Sacred Heart Hospital, Eau Claire
Sacred Heart-St Mary's Hospital, Inc, Rhinelander
Sauk Prairie Memorial Hospital, Prairie du Sac
Shawano Medical Center, Shawano
Sheboygan Memorial Medical Center, Sheboygan
Sinai Samaritan Medical Center, Milwaukee
St Agnes Hospital, Fond du Lac
St Clare Hospital, Baraboo
St Clare Hospital, Monroe
St. Elizabeth Hospital, Appleton
St Francis Hospital, Milwaukee
St Francis Medical Center, La Crosse
St Joseph's Community Hospital, West Bend
St Joseph's Hospital, Chippewa Falls
St Joseph's Hospital, Milwaukee
St Joseph's Hospital & Marshfield Clinic, Marshfield
St Luke's Hospital, Milwaukee
St Mary's Hospital, Green Bay
St Mary's Hospital, Milwaukee
St Marys Hospital Medical Center, Madison
St Mary's Hospital-Ozaukee, Mequon
St Michael Hospital, Milwaukee
St Michael's Hospital, Stevens Point
St Vincent Hospital, Green Bay
Stoughton Hospital Association, Stoughton
Theda Clark Regional Medical Center, Neenah
Veterans Administration Medical Center, Tomah
Watertown Memorial Hospital, Watertown
Waukesha Memorial Hospital, Waukesha
Wausau Hospital Center, Wausau
West Allis Memorial Hospital, West Allis
Winnebago Mental Health Institute, Winnebago

Accredited Specialties

American Heart Association of Wisconsin
Milwaukee Gynecological Society
Milwaukee Ophthalmological Society
Wisconsin Academy of Family Physicians
Wisconsin Allergy Society
Wisconsin Association for Perinatal Care
Wisconsin Neurological Society
Wisconsin Psychiatric Association
Wisconsin Society of Anesthesiologists
Wisconsin Society of Obstetrics and Gynecology
Wisconsin Society of Otolaryngology-Head and Neck Surgery
Wisconsin Society of Pathologists
Wisconsin Urological Society

Accredited County Medical Societies

Marinette-Florence County Medical Society
Pierce-St Croix County Medical Society

Other Accredited Organziations

PIC Wisconsin
Racine Academy of Medicine
Wisconsin Association of Medical Directors
MetaStar

ACCME Accredited

Medical College of Wisconsin
UW Center for Health Sciences
Interstate Postgraduate Medical Association
State Medical Society of Wisconsin ❖

Membership Facts

Whether you are a medical student, resident, fellow, full-time or part-time practicing physician, or retired, the SMS has a membership classification to fit your needs. When you apply for membership, the county medical society elects you and you automatically join both the county medical society where your principle practice is located and the SMS. Membership in the AMA is strongly recommended.

Dues for regular, part-time practice, or over-age-70 membership classifications may be paid in one lump sum or in two equal installments, with the first half due by Oct 1, 1997, and the second half by Jan 1, 1998. We accept MasterCard and VISA.

A more detailed list of SMS membership classifications and their corresponding dues follows.

SMS Membership classifications

Regular: Member in active practice. Regular members who are in their first or second year out of residency, fellowship or military obligation may qualify for reduced dues for the SMS, the AMA, or both.

Part-time practice: Physician, regardless of age, who practices 1,000 hours or less during the calendar year, but does not qualify for retired membership.

Resident: Member who, as of January 1 of the dues year, is in an approved training program as a hospital resident or research fellow and is licensed to practice medicine and surgery in Wisconsin.

Military service: Member who is serving in the US armed forces or US Public Health Service (generally not to exceed 5 years).

Associate: Member whose dues are waived because of financial hardship due to illness or disability. This classification is temporary and is reviewed on an annual basis.

Retired: Member who has completely retired from practice (works less than 240 hours each year). All dues are waived unless county society indicates it wishes to charge county dues. (Retired and life members who wish to receive *Medigram* and the *Wisconsin Medical Journal* must pay a $45 publications fee.)

Life: Member who has held membership in a state medical society for 50 years. Past presidents of the SMS are also included in this category.

Honorary: Physician named an honorary member by the Board of Directors for outstanding contributions to the medical profession.

Over age 70: Member in active practice who is over 70 years of age.

Scientific fellow: Person engaged in teaching or research in the basic sciences at an accredited college or university — but not holding a degree in medicine or osteopathy — by invitation and consent of the Board of Directors.

Emeritus: Retired member who has chosen not to renew his or her license, at the discretion of the Board.

Candidate: Member attending a medical school in Wisconsin or fulfilling a postgraduate obligation prior to eligibility for licensure.

1997 Dues	*SMS*	*AMA*	*County*
Regular	$665	$420	Varies
First year in practice	$332	$210	Varies
Second year in practice	$498	$315	Varies
Two physician family	$615	$420	Varies
Part-time practice	$332	$420	Varies
Part-time over age 65	$332	$210	Varies
Resident	$ 75	$ 45	Varies
Military service	-0-	$280/$45	Varies
Associate	-0-	-0-	-0-
Retired	-0-	$ 84/-0-*	Varies
Life	-0-	$420/-0-*	-0-
Honorary	-0-	$420/-0-*	-0-
Over age 70	$332	$420/-0-*	Varies
Scientific Fellow	-0-	-0-	-0-
Emeritus	-0-	-0-	-0-
Candidate:			
Student	$ 10	$ 20	$2.50
Postgraduate-one	$ 10	$ 45	Varies

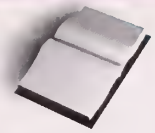
*Physicians in these categories may be eligible for exemption from AMA dues under the grandfather clause. (AMA dues-exempt members who were granted exemption before 1986 based on previously-established criteria, with the exception of financial hardship or disability, will automatically be exempt from dues.)

Current AMA policy provides for only two categories of exemptions: financial hardship or disability and 65 years of age or older and fully retired. AMA dues for under-age-65 and fully-retired members may be reduced to $84.

State society dues are prorated on a monthly basis for those elected to membership July 1 through Aug 31. Those elected after Aug 31 are exempt from dues for the balance of the year in which they are elected. AMA dues are prorated on a semiannual basis.

To begin the membership process, contact your county medical society or call the Membership Department of the SMS.❖

Publications Available



Manuals and Pamphlets Available Through SMS

A number of brochures are available from the SMS. Most are intended as useful physician-education tools on socioeconomic and legislative topics; others serve as patient-education materials on a variety of medical issues. Some are available free of charge, while others require a nominal fee. Contact the SMS staff person listed or call the SMS Communications Department for more information: (800) 362-9080, or in Madison, (608) 257-6781.

Physician Education Tools

Alzheimer's Disease Physician Reference Manual - free. Developed by the Wisconsin Alzheimer's Information and Training Center in 1996. Contact Lynn Sherman, SMS Public Affairs.

Anatomy and Physiology - $25.00 + tax. This manual reviews the basics of body structure and function including both normal and pathological conditions. It provides a basic understanding of problems commonly encountered in health care settings and, combined with medical terminology, provides the foundation needed for accurate reimbursement coding and medical chart entries. Contact Elaine Stern, SMS Seminars.

Child Safe Information - free. Brochures, safety check lists, matching grant forms, bike helmet and firearm trigger lock information, press release. Contact Eric Ostermann, LASI, or Lynn Sherman, SMS Public Affairs.

Closing a Practice - free. Article from *Wisconsin Medical Journal*, April, 1997. Contact Sonia Porter, SMS Office of General Counsel.

Considerations for Selling a Practice - free to SMS members. AMA publication. Contact Sonia Porter, Office of General Counsel.

Customer Service Enhancement for the 90s - $25.00 + tax. This manual is designed to prepare you for the fast-paced 90s and teach you skills to keep patients coming back. Contact Elaine Stern, SMS Seminars.

DNR Bracelet - Emergency Care Do-Not-Resuscitate Order (DNR) forms, Do-Not-Resuscitate Information sheets and bracelet inserts. The 1995 Wisconsin Act 200 allows for the issuance of DNR bracelets by physicians to qualified patients. Bracelet inserts and information are also available through the Department of Health and Family Services, EMS office, at 608-267-7147, or contact Lynn Sherman or Colleen Wilson.

"Domestic Violence: Identification, Treatment and Referral for the Health Care Professional" Video - available for loan. The video, developed by UCLA Medical Center and Belson/Hanwright Video and endorsed by the SMS Injury Prevention and Control Commission, provides specific examples of domestic abuse victims being seen in emergency department and clinic settings. The video is 20 minutes in length. For the video and other educational material on domestic violence contact Lynn Sherman, SMS Public Affairs.

Getting Acquainted with Managed Care - $25 + tax. This manual is designed for those at the entry level of the managed care arena. It will provide you with definitions to commonly used terms, contracting basics, Medicare and Medicaid movement toward a managed care environment, and much more. Contact Elaine Stern, SMS Seminars.

Health Insurance 101 - $25.00 + tax. This handbook is designed to introduce the basics of the health insurance industry. Emphasis is placed on basic health insurance terminology, benefit interpretation, types of contracts and resolving claim problems. Contact Elaine Stern, SMS Seminars.

HMO Profile Booklet - SMS Members, $15; non-members, $55. Contact Kevin Wymore, SMS Public Affairs.

If You Have a Complaint About Medical Care - This brochure explains the SMS's grievance and peer review system. Contact Sonia Porter, SMS Office of General Counsel.

Legal Guidelines for Health Care Records - $25 + tax. This manual is designed for medical group managers and office personnel and covers all aspects of medical records management. Contact Elaine Stern, SMS Seminars.

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Physician Education Tools

(Continued)

Living Will and Durable Power of Attorney for Health Care Forms - free. State of Wisconsin publication. Contact Sonia Porter, SMS Office of General Counsel.

Model Legal Forms - free. Contact Kalisa Barratt, SMS Office of General Counsel.

Medicaid Basics - $25 + tax. This manual is designed to provide basic information applicable to any provider specialty billing Wisconsin Medicaid. It contains an overview of the Medicaid program, sample Medicaid ID cards and their benefit limitations, procedures for completing the HCFA 1500 for Medicaid reimbursement, Medicare crossover claim filing procedures and follow-up procedures. Contact Elaine Stern, SMS Seminars.

Medicaid HMO Backgrounder - free. Recipient education poster. Contact Kevin Wymore, SMS Public Affairs.

Medical Professional Liability Insurance: Claims Made or Occurrence? This brochure explains for physicians how the policies work, how premiums are established, how coverage is terminated, the limits of liability and how to decide between the types of coverage. The brochure was produced by the SMS Young Physicians Section and is particularly useful for physicians just beginning their practice. Revised in 1992. Contact Alice Ballweg, SMS Insurance.

Medical Record Retention Information from Seminars - free. Contact Sonia Porter, SMS Office of General Counsel.

Medical Record Statutes - free. Contact Sonia Porter, SMS Office of General Counsel.

Medicare Part B Basics - $25 + tax. This basic manual is designed for those beginning to bill and file claims to the Medicare Part B program. It discusses the beneficiary enrollment procedure, step-by-step instructions on filling out the HCFA 1500 claim form, the appeals process, Medicare Reimbursement and more. Contact Elaine Stern, SMS Seminars.

Medicare Part B Database - $35 + tax. A paper copy of the Medicare Part B Fee Schedule Database (MFSDB). The listing includes conversion factor information, relative value units (RVUs), surgery indicators (global, multiple, bilateral, co-surgery, and team), and payable surgical tray information. Contact Elaine Stern, SMS Seminars.

Medicare Part B Physician Reference Manual - $49.00 + tax. This guidebook is designed to help the physician's billing staff stay on top of Medicare's policy and procedures. Contact Elaine Stern, SMS Seminars.

Occupational Health Guide - This revised edition contains information for medical and nursing personnel in the commercial and industrial setting. Entitled "Your Body At Work," the guide includes information on medical directives, planning for medical emergency care, OSHA Bloodborne Pathogen Standards and universal precautions for transmission of HIV infection and tuberculosis. A supplement with material on the "Americans With Disabilities Act" and other pertinent information will be available in the fall of 1997. Contact Jane Anderson, SMS Foundation.

Office and Reception Skills - $25.00 + tax. This handbook is designed for front-office personnel. It gives instruction on scheduling appointments, telephone etiquette, reception skills and interaction with patients. Contact Elaine Stern, SMS Seminars.

PartnerCare - A poster and brochure aimed at educating elderly low-income patients about this important SMS voluntary Medicare assignment program. Contact Tamara Larson, SMS Seminars.

A Physician's Guide to Wisconsin Health Law, Vol. III - This handbook deals with the more important legal and socioeconomic issues affecting the practice of medicine in Wisconsin. The information in this book will help you avoid pitfalls, answer your patients' questions, ask the right questions when you need counsel, and become a more involved and effective voice for the profession. Published in 1995. Contact Sonia Porter, SMS Office of General Counsel. Volume IV will be published Summer, 1997.

Physician Education Tools

(Continued)

Physician Support Packet for Those Facing Malpractice Mediation - free. Contact Karen Baier, SMS Public Affairs.

RBRVS Schedule - $21.50. January/February Federal Register. Contact Mary Earll, SMS Public Affairs.

State Medical Society of Wisconsin Policy Compendium: 1996-1997 Edition The compendium provides all SMS current policies. This is updated yearly and is available to all SMS members. Contact Maria Van Cleve, SMS Membership and Professional Relations.

Smoking - The National Cancer Institute's Manual for Physicians, entitled "How to Help Your Patients Stop Smoking" is a comprehensive guide of tips and facts for decreasing your patient's use of tobacco products. Materials on how to develop a patient smoking cessation program, creating a smoke-free office and easy-to-use tears are included. Contact Lynn Sherman, SMS Public Affairs.

Statewide Physician Health Program - This brochure offers information on the Statewide Physician Health Program of the SMS. The program provides compassionate assistance to Wisconsin physicians suffering from any condition which may progress to impairment. A brief discussion of education, identification, assessment and intervention is provided in this 1995 publication. Contact Sonia Porter, SMS Office of General Counsel.

Tuberculosis - "The Core Curriculum on Tuberculosis: What the Clinician Should Know" was developed by the US Department of Health and Social Services and the CDC to assist physicians in all aspects of TB control. The guide provides information on screening for TB, infection control, diagnosis and preventive therapy. Contact Lynn Sherman, SMS Public Affairs.

Worker's Compensation - The SMS makes available to physicians several brochures and forms designed to ease the burden of worker's compensation cases, including, "The Guide for Wisconsin Doctors: Using the WC-16B for Worker's Compensation" published in 1996 and the booklet "How to Evaluate Permanent Disability," published in 1995, and the "Return to Work/Physical Capabilities" form, produced by the SMS Commission on Occupational and Environmental Health. This revised form was developed to be comprehensive and user friendly for employers, physicians and patients. Contact Lynn Sherman, SMS Public Affairs.

Coding Publications

Introduction to CPT-4 Coding - $25.00 + tax. This basic manual is designed for beginning coders. It stresses the rules and guidelines of the CPT-4 book. There are beginning level exercises stressing the fundamentals. Contact Elaine Stern, SMS Seminars.

Introduction to ICD-9 CM Coding - $25.00 + tax. This basic manual is designed for beginning coders. It stresses the importance of the ICD-9-CM system and introduces the guidelines necessary to use the system correctly. Contact Elaine Stern, SMS Seminars.

Intermediate CPT-4 Coding - $25.00 + tax. This manual is designed for coders with a minimum of six months coding experience. It reviews the fundamentals and challenges the coder with a series of intermediate level problem-solving exercises to expand coding skills. Contact Elaine Stern, SMS Seminars.

Intermediate ICD-9 CM Coding - $25.00 + tax. The intermediate ICD-9-CM manual is designed for coders with a minimum of six months coding experience. It reviews the basic fundamentals of the ICD-9-CM coding system and focuses on the ICD-9-CM rules through a series of challenging exercises. Contact Elaine Stern, SMS Seminars.

CPT-4 & ICD-9-CM Coding: Update 1996 - $25 + tax. This manual is intended for experienced coders and includes an intense series of advanced coding exercises designed to fine-tune coding skills. It will also reinforce coding guidelines and sharpen ICD-9-CM coding skills to provide the highest quality diagnostic information needed to enhance reimbursement. Contact Elaine Stern, SMS Seminars.

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Coding Publications
(Continued)

Cardiovascular Coding for Physician Reimbursement - $25.00 + tax. This manual is designed for advanced coders and addresses advanced level issues in both CPT-4 and ICD-9-CM unique to cardiovascular coding. Contact Elaine Stern, SMS Seminars.

Evaluation and Management Coding - $25.00 + tax. This manual is designed to help coders understand the CPT-4 Evaluation and Management (E/M) codes. The manual contains exercises to stress the necessary information needed to use the E/M codes correctly. Contact Elaine Stern, SMS Seminars.

General Surgery Coding for Physician Reimbursement - $25.00 + tax. This specialty manual is designed for advanced coders and provides instruction in general surgical coding including the importance of accurate CPT-4 and ICD-9-CM coding for optimal surgical reimbursement. Contact Elaine Stern, SMS Seminars.

Medical Terminology - $25.00 + tax. This manual is designed to introduce basic medical terminology. There is an emphasis on terms commonly used for insurance claims and coding. Contact Elaine Stern, SMS Seminars.

OB/GYN Coding for Physician Reimbursement - $25.00 + tax. This manual is designed for advanced coders and addresses issues in both CPT-4 and ICD 9-CM coding encountered in the OB/GYN practice. Contact Elaine Stern, SMS Seminars.

Orthopedic Coding for Physician Reimbursement - $25 + tax. This manual is designed for advanced coders and addresses issues in both CPT-4 and ICD-9-CM Coding encountered in the Orthopedic practice. Contact Elaine Stern, SMS Seminars.

Urology Coding for Physician Reimbursement - $25 + tax. This manual is designed for advanced coders and addresses issues in both CPT-4 and ICD-9-CM Coding encountered in the Urological practice. Contact Elaine Stern, SMS Seminars.

Patient Brochures

What is Managed Care? - This consumer/patient brochure is on its second printing (10,000 press run) since its introduction in January 1997. Produced by the SMS Commission on Public Information, in consultation with the SMS sub-committee on managed care, the brochure is intended to provide your patients with a general understanding of managed care plans. The purpose behind this initiative is patient education and advocacy, provided in a factual, objective manner. The brochure can be downloaded from WISMED, the SMS World Wide Web site, at http://www.wismed.com/managedcare.htm Or, if you would like to order quantities of the brochure for distribution to your patients, please contact Lynne Thomas, SMS Communications.

Healthy Start Brochures/Posters
Healthy Start posters for medical offices and patient-oriented brochures in English, Spanish and Hmong are available through the SMS. Healthy Start is the program that provides comprehensive Medicaid health insurance coverage for pregnant women and infants under more generous income criteria than Aid to Families With Dependent Children (AFDC). For more information on the program and brochures and posters contact Kevin Wymore, SMS Public Affairs.

Lead Poisoning
Developed and published by the US Environmental Protection Agency, the brochure "Lead Poisoning and Your Children" provides easy to read patient information on how to reduce the risk of lead poisoning. Published in 1992. Contact Lynn Sherman, SMS Public Affairs.

UCR, A Patient's Guide: How Much Will My Health Insurance Pay?
This brochure explains what "usual, customary and reasonable" means, how misunderstandings concerning it can be avoided and how problems can be resolved when they occur. This brochure is suitable for enclosure in office statements or for placement in patient reception areas. Revised in 1996. Contact Merry Earll, SMS Public Affairs.

Patient Brochures
(Continued)

Vaccine Information
The new "Vaccine for Children" (VFC) program, which started October 1, 1994, requires all public and private health care providers to use the new patient-friendly information statements. When administering DTP, Td, MMR, DTaP, DT, DTP/Hib combinations and polio, these information statements are required. These forms are available from SMS Holdings by contacting Bill Guerten at 800-545-0632. The price is $25 for 100 sets of 4 forms.

Your Right to Direct Your Future Health Care
Facing questions on advance directives? The SMS now has pamphlets for patients explaining advance directives and medical treatment decision making. All federally-certified nursing homes, hospitals, home health agencies, hospices, personal care agencies, and health maintenance organizations are required under the federal Patient Self-Determination Act to provide written information to patients describing their rights regarding self-determination of medical care. As a result, many patients will be looking to their doctors for information. This brochure was developed by the Wisconsin Division of Health in cooperation with the SMS and other organizations. Published in 1991. Contact Lynn Sherman, SMS Public Affairs.

Services

Hospital Medical Staff Bylaw Review - Contact Kalisa Barratt, SMS Office of General Counsel.

Managed Care and Physician Employment Contract Review
Contact Kalisa Barratt, SMS Office of General Counsel.

Mediation - Brochure/service free to patients who have quality of care complaints. Contact Sonia Porter, SMS Office of General Counsel.

Peer Review - Service provided, by contract, for objective medical peer review to a variety of requestors, e.g., physicians, hospitals or clinics. Contact Sonia Porter, SMS Office of General Counsel.

Statewide Physician Health Program - Intervention for alcohol, other drugs, senility, etc. - free. Contact Sonia Porter, SMS Office of General Counsel.

Harry Zemel, MD, addresses the House of Delegates.

WISPAC and Physicians for Better Government

WISPAC Officers
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Carl Eisenberg, MD, Vice-Chairman
Sandra Osborn, MD, Secretary-Treasurer
Robert McDonald, MD Assistant Secretary-Treasurer

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DeLore Williams, MD, Elm Grove
Vacancy
Vacancy

In 1972, the **Wisconsin Physicians Political Action Committee** (WISPAC) was created to meet the demands of physicians concerned with the future of health care in Wisconsin. WISPAC is the State Medical Society's bipartisan political action committee dedicated to working on behalf of physicians. WISPAC members understand that by sending a strong message to elected officials and by becoming a part of the political process, it lets the legislature know that physicians are informed and only support candidates who support good medicine.

Physicians for Better Government (PFBG) was established in 1987 as a direct-givers program, or political conduit. The PFBG allows you to put your money into your own individual account, over which you have full authorization. Through the PFBG you are able to give money only to candidates you support, and it enables you to receive individual recognition from the candidates.

The WISPAC Board of Directors is designed primarily of physicians and individuals concerned with educating the legislature about positive health care reform that will safeguard the rights of patients as well as respect a physician's professional autonomy. At the Annual Meeting, the WISPAC Board of Directors discussed current political trends at the state and national levels, and addressed the need to recruit new WISPAC/PFBG members.

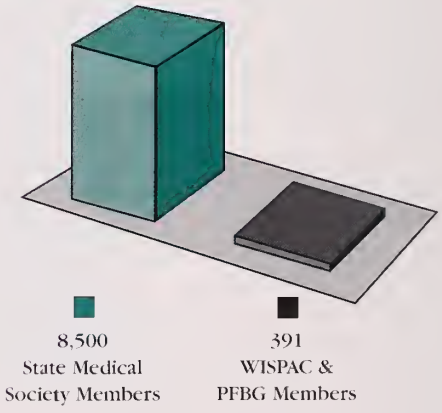
The diagram below illustrates the need for involvement in WISPAC and PFBG. This chart represents the number of members in the SMS and the number of those that are WISPAC/PFBG members. As of April of this year, only 391 of 8,500 State Medical Society members belonged to WISPAC/PFBG. The current numbers are down from 531 members last year at the same time. This represents a decrease of 140 members in just one calendar year. Political apathy amongst physicians is at an all time high. This severally effects the financial ability to support candidates who support medicine. With numbers like these, it is not difficult to understand why trial lawyers, insurance companies and chiropractors get what they want from the legislature. It is not to late to stand up for the medical profession! Do not allow the trial lawyers', insurance companies' and chiropractors' opinions to sway the legislature. Take control of medicine's future and join WISPAC and PFBG today!

The power that PACs possess can positively effect the political process. By joining WISPAC and PFBG you are sending a strong message to our elected officials that physicians care about candidates who listen to them. Becoming a part of the political process and staying informed lets the legislature know that physicians will be heard and that doctors support candidates who support medicine.

No other association for physicians can offer more information about current elected officials and candidates running for political office. We are here so that you can remain politically informed and knowledgeable about legislation that could effect you, your practice and your patients' rights.

One may contribute to any or all of these levels. Suggested contribution levels are: $500 for Chairman's Club (normally allocated $350 for PFBG, $100 WISPAC, $50 AMPAC); $200 for Sustaining Membership (typically split $100 PFBG, $50 WISPAC, $50 AMPAC) and $150 for Sponsoring Membership ($50 PFBG, $50 WISPAC, $50 AMPAC). All donations to WISPAC and PFBG are greatly appreciated

If you have any questions or would like more information about WISPAC/PFBG and how you can become politically active, please contact **Peggy Partenfelder,** Political Membership Coordinator at SMS **ext. 232** or she can be reached via e-mail at: **PEGGYP@smswi.org.** ❖



SMS Foundation Facts

The SMS Foundation is a non-profit, non-stock Wisconsin corporation, chartered in June 1955. The Board of Directors adopted to change the name from the Charitable, Educational and Scientific Foundation to the State Medical Society Foundation or simply the SMS Foundation in June, 1996.

Management

The foundation's governing power is vested in a board of trustees composed of directors and officers of the SMS, other medical and non-medical members elected by the board of directors and one representative elected by each component medical society. Non-medical members may be elected from time to time by the SMS Board of Directors, but the number of such trustees shall not at any time be less than five or more than ten.

The board of directors of the corporate trustees consists of 18 members including the president, vice president and treasurer of SMSF, and in addition, 12 members, seven of whom may be non-medical trustees, each elected for staggered three-year terms.

Registration

The foundation is registered with the Secretary of State as a charitable organization for purposes of contributions and fund-raising under [***]440.41(2) of the Wisconsin Statutes.

Legal

The foundation retains William F. Mundt of the firm Murphy & Desmond, SC, 2 E Mifflin St, Madison, WI 53703; 608-257-7181, for advice on legal matters. Ms. Julie Ann Hein serves as the executive director who works directly with the executive vice president and deputy executive vice president of SMS and is responsible for all duties of the foundation.

Tax Information

Contributions to the SMS Foundation are tax deductible under both state and federal tax laws. The foundation is a 501(c)(3) non-profit corporation. As in all matters relating to your financial affairs, the valuation, form and tax aspects of gifts, to the foundation should be discussed with your attorney, accountant or other advisor.

Officers

President: Kenneth M. Viste Jr, MD, Oshkosh
Treasurer: Rockne G. Flowers, Stoughton
Secretary: John E. Patchett, JD,* Madison

Directors

Betty Bamforth, MD, Madison
David Falk, MD, Madison
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Lucille Glicklich-Rosenberg, MD, Milwaukee
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Stephen B. Webster, MD, La Crosse
Ronald G. White, Madison

Staff

Executive Director: Julie A. Hein, Madison
Administrative Coordinator: Jane Anderson, Madison
Donor Records Assistant: Jean Buege, Madison
Grants Writer and Prospect Researcher: vacant

*ex-officio ❖

An SMS Foundation Guide to Gifts

Gifts to the foundation may take a number of forms: cash, bequests, trusts, life insurance, real estate, stock or other securities -- some physicians are making the Foundation a beneficiary of their wills. Such gifts may be designated as unrestricted or for specific, immediate use at the discretion of the Foundation trustees. They may also be restricted or earmarked for specific purposes of interest to the donor.

The foundation currently asks for a voluntary contribution of $75 from the SMS membership through the dues statement and other direct-mail solicitations.

Cash gifts

Most gifts received by the foundation are in the form of cash, and personal checks are made payable to the SMS Foundation. These gifts, as well as others, may be designated in honor of a relative, friend or associate. The Foundation maintains a memorial program which gives the donor an opportunity to remember a loved one.

Planned Gifts

The simplest planned gift to make is through a bequest. A bequest is a gift to a beneficiary made through a will. Ideally, if the donor can notify the beneficiary or charitable organization of their intentions, the organization can plan accordingly for future programs. The donor may choose simple wording to benefit the SMS Foundation: "I give to the SMS Foundation of the State Medical Society of Wisconsin, a non-profit, non-stock Wisconsin Corporation, the sum of $ (or specifically describe the real or personal property)".

Endowment Plus

Life insurance offers an easy means to make a substantial gift as well as to provide tax advantages for the donor. The SMS Foundation is pleased to offer the Endowment Plus irrevocable insurance program which is underwritten by Transamerica Assurance Company.

With a one-time gift or pledge payment agreement over five years, donors agree to let the SMS Foundation purchase an endowment life insurance policy in their name. The SMS Foundation will own the policy and be the designated beneficiary.

The contribution is fully tax deductible and there are no personal or medical questions asked and no physical exam is required. For annual gifts as low as $200, a substantial endowment can be created in your name.

Real Estate

Any standard form of warranty deed or acceptable quit claim deed may be used to deliver real estate to the foundation.

Stock or Other Securities

Current gifts may take the form of stock or other securities which have appreciated in value. Gifts of appreciated securities permit the donor to realize substantial tax advantages.

Trusts

Some find it advantageous to make a contribution to the foundation, but retain the income from the contribution for the duration of their life or the lives of others. There are important tax advantages to these arrangements. The trustee of such "living trusts" may be a bank, trust company or the foundation.

Among the several types of "living trusts" are: pooled income gifts and unitrust gifts. The SMS Foundation currently operates a Pooled Income Fund.

Pooled Income Fund

Life income gifts mean gifts from which you and a designated beneficiary receive lifetime income. After the lifetimes of the "income beneficiaries," the SMS Foundation will receive the principal to reinvest or use for whatever purposes.

A Pooled Income Fund combines gifts from numerous donors in a single fund managed by the charity. Pooled Income Funds are ideal for highly-appreciated stock contributions. Goals that can be accomplished by making a contribution to a pooled income fund are: *Immediate savings through an income tax deduction in the year of the gift; *Possibly increasing your current income; and * Elimination of a capital gains tax.❖

SMS Foundation History

The SMS Foundation was chartered by the SMS in 1955 as a non-profit, non-stock corporation to enable physicians and other friends of the profession to support, through gifts and grants, projects vitally affecting scientific medicine and public health. The Foundation's scope of interest has grown because of estate gifts received; therefore, a number of worthy programs affecting medical education and health care needs in Wisconsin can be accomplished. The future of the Foundation holds an array of opportunities and challenges.

SMS Foundation's Amy Hunter-Wilson, MD, Scholarship Award recipients (left to right) Rachel Bowman, Jason Gospodarek and Royetta Duclon, with Ken Viste, Jr, MD.

Research, Scientific and Public Health

Over the years, a number of research and scientific funds have been created from memorial contributions. The income from the funds provide a number of grants each year to the areas of surgery, family practice, internal medicine, and biomedical research.

Occupational Health Guide

The foundation also produces an Occupational Health Guide "Your Body at Work" which focuses on being a practical reference for medical and nursing personnel in the commercial and industrial setting.

Public Health Care Issues

A number of grants are allocated each year for public healthcare initiatives. Children's issues, mental health, and AIDS have been some of the primary focuses over the last several years.

Medical Outcomes Research Project

Started in 1995, the Medical Outcomes Research Project (MORP) is the culmination of four years of study of the best medical quality assessment and improvement models available. Through its Medical Quality Research Council and condition study groups, the Project strives to provide a neutral forum for physicians to design outcomes studies and engage in data collection, analysis, and dissemination of outcomes research. Outcomes studies are organized by disease or condition, of which there are currently three - Adult Asthma, Pediatric Asthma and Acute Low Back Pain. A collaborative Acute Myocardial Infarction study is in the planning process with MetaStar, and the Project is providing support for additional studies including hip and knee replacement, Alzheimer's Disease and patient satisfaction.

Although its original emphasis was on promoting outcomes research and examining practice variation, the Project has expanded its mission to embrace quality improvement science and its application in the health care setting including disease management programs, improving the physician-patient relationship through better communication and monitoring and feedback of patient satisfaction measures. As another reflection of the rapidly changing health care environment, the Medical Outcomes Research Project condition studies are designed to help validate guidelines by collecting infor-

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mation on patient centered outcomes of care and measuring process and patient compliance. Information collected through the Project and its studies is maintained with strict confidentiality and studies are often subject to institutional review board approval at participating health care facilities even though not involving human subjects research.

Student Loans, Grants and Scholarships

One of the most important activities of the SMS Foundation is the student loan program. Established in 1955, the Foundation's general student loan fund is designed to assist needy, deserving students preparing for careers in medicine, nursing, and other allied health fields. Long-term, low-interest loans are interest-free until after the student graduates. Personnel in the financial aid departments of Wisconsin medical schools and technical schools cooperate with the foundation in identifying needy and deserving students.

Many young men and women can achieve their medical careers only because of the availability of low-interest loans. In fact, the average medical student today can anticipate graduating with debt obligations ranging from $75,000 to $100,000. Through fiscal year ending June, 1997, the foundation granted 53 loans to medical and allied health students for a total of $148,766. Repayments during fiscal year 1996-97 totalled $151,930. Since the loan fund was established, 1,468 students have received $2,447,656 in long-term, low-interest loans.

Although the Foundation's primary emphasis is with loans, some outright scholarships and grants are made to fulfill the wishes of some donors and the needs of certain potential recipients. These special health career student loan and scholarship funds are administered by the foundation according to the wishes of the individual or organization establishing and supporting the fund.

Applications may be procured from the SMS Foundation, 330 E Lakeside St, Madison, WI, 53715; or the medical college's financial aid offices. Loan amounts have increased from $3,000 to $5,000 for juniors and seniors.

To inquire how you or your organization can establish a special student loan or scholarship fund, contact Julie A. Hein, SMS Foundation Executive Director.

Wisconsin Association of Senior Physicians

This group was formed in fall of 1980 with the premise of planning and implementing ways in which retired physicians can continue to be a part of the advances and progress of medicine. The staff of the SMS Foundation coordinates an annual meeting.

Foundation Grant Allocation

THANKS TO THE EFFORTS of a tremendous number of physicians, the Foundation is supporting a greater number of programs on a broader spectrum.

The list of grants provided by the Foundation during this past year spells substantial achievement. Through physician support and leadership, the Foundation hopes to encourage similar support from others. With education as its vanguard, the SMS Foundation prides itself in supporting medical education, public health, research and history programs.

During 1996, the Foundation contributed to a number of worthy projects through unrestricted and restricted contributions:

* Barbara Scott Maroney Fund to sponsor a lecture on diabetes;
* Blackhawk Council of Girl Scouts Mentoring Program;
* Madison Children's Museum to sponsor an exhibit entitled, "Let's Grow";
* Tobacco-Free Wisconsin Coalition;
* UW Alcohol & Other Drug Abuse Education Intervention Program;
* UW Clinics Research Park for Research Project;
* UW Department of Pediatrics to sponsor Sports Fitness brochure;
* Volunteer Braillists & Tapists, Inc.;
* Wisconsin Council on Children & Families Wiskids Count Child Health Book;
* Wisconsin Emergency Nurses Association;
* Wisconsin Primary Health Care Association;
* Wisconsin Research Network conference;
* Wisconsin Safety Patrols, Inc. to sponsor the trip to Washington DC; and
* Wisconsin Surgical Society to sponsor lecture;

For further information regarding the SMS Foundation, please contact Julie A. Hein, SMS Foundation Executive Director.

PIC Wisconsin – State of the Corporation February, 1997

A.M. Best, the nation's leading insurance rating service and watchdog for stability in the insurance industry, announced in January 1996, their decision to upgrade PIC Wisconsin's rating from B++ (Very Good) to A- (Excellent). They have since announced their intention to maintain our A- rating with a "stable" designation, meaning that our operational integrity and financial stability are expected to remain constant in the coming years. This news is particularly exciting for PIC in light of Best's decision to downgrade eight top insurance companies from an A+ to an A.

Best has recognized that PIC Wisconsin will successfully take on the challenges ahead. We attribute this success to three factors: excellent, dedicated performance by PIC employees, continuing support from our customers, and the strategic decisions we have made and put in place in recent years.

These strategic plans for responding to emerging market needs have served the company exceedingly well. We have focused on building business through our Insurance Products and Risk Consulting units and through geographic and product diversification.

PIC's Insurance Products unit provides insurance products and services for clients requiring more traditional forms of professional liability protection. Our Risk Consulting unit meets the needs of customers requiring assistance with programs involving reinsurance, self-insurance, risk transfer or non-risk bearing risk management or claims services. Though we've adapted these specialized units to meet the needs of specific policyholders, we still uphold the traditional foundations of our company:

- Comprehensive risk management emphasizing practical, efficient, educational programs created with our clients;
- A tenacious defense stance against frivolous claims;
- A financial profile that reflects extraordinary integrity and stability.

Future growth will also come from adding to the number of states where we seek to insure professional liability risks. We will sell insurance in four states in 1997: Illinois, Nebraska, Nevada and Wisconsin. We have also received licenses in Iowa, Minnesota and the Dakotas, and we will begin to investigate these and other attractive territories for growth.

PIC continues to challenge the frontier of insurance information systems. Our capabilities in this area were validated in 1996 by the sale of our software to another insurance company. Further, in December we installed a new policy management system that directly supports our business plan. This system will be enhanced through the first three quarters of 1997.

PIC's policy simplification initiative resulted in the complete redevelopment of our professional liability policies. Individual and entity policies and forms were rewritten to allow for use in multiple states and for multiple markets. This streamlines our internal processes and increases response times by eliminating the need for the previous claims-made and occurrence versions of our MPL Policy for Wisconsin, MPL policy for Nebraska, DPL policy for Nevada, DPL policy for Wisconsin, Group Practice MPL policy, Group Practice DPL policy, etc. 1997's plans call for continued enhancements of our coverages and features.

Fiscal Highlights

Statutory net income for 1996 was $9.2 million versus $7.1 million in 1995. Statutory assets grew from $133.8 million to $136.3 million, and our loss reserves continue to be actuarially sound, decreasing from $84.7 million in 1994 to $78.8 million this past year.

PIC Wisconsin concluded the year with 3,860 physician policyholders. This gives us a 59% share of the available SMS market. Our strategy to offset consolidations and increased competition in the physician market by diversifying our premium base continued as our dental and hospital programs grew. By year end 1996, PIC had 11 hospitals in-force, compared to eight at the close of 1995 and four at year end 1994.

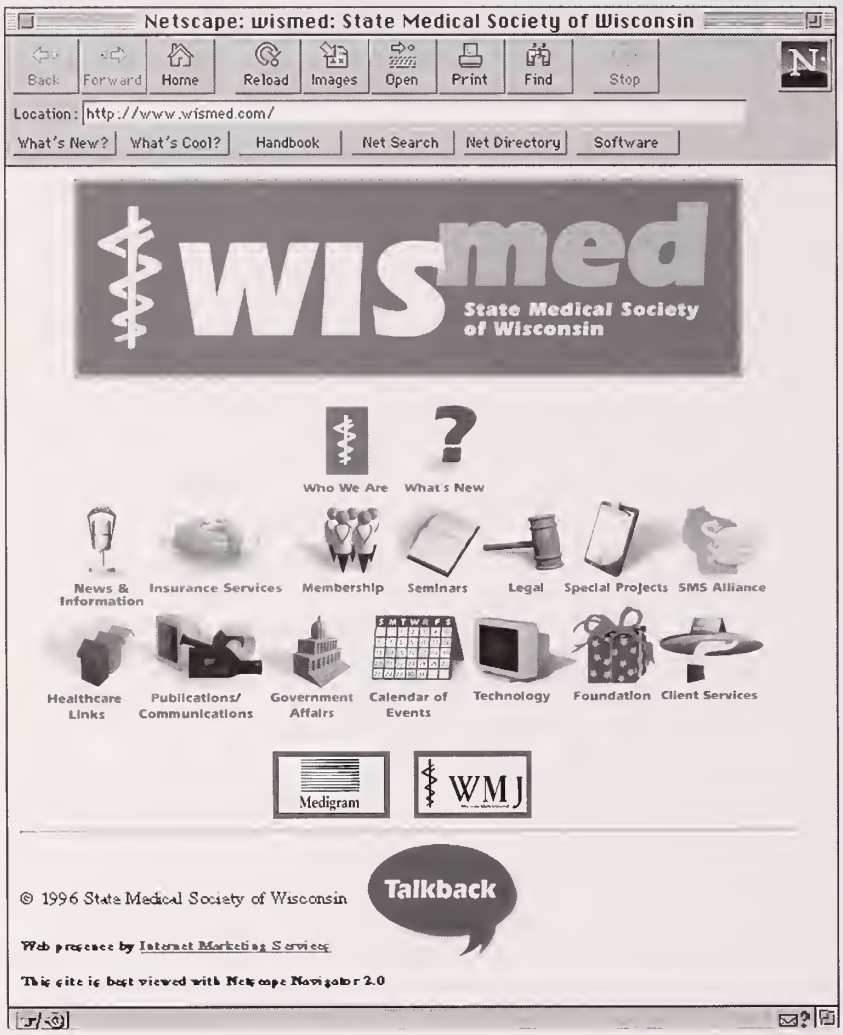
Dental policyholder counts increased in 1996 to 623 from 525 recorded in 1995. These numbers give us a 38.9% market share of Nevada Dental Association Members and a 13.2% market share of Wisconsin dentists. The decision to purse dental groups in Wisconsin rather than individual dentists proved successful in 1996, as we signed one new dental group, accounting for 37 new dental policyholders. We will continue to target these groups in 1997.

Our geographic diversification strategy included selling medical professional liability products in Nebraska beginning in November of 1996. Initial reception in the state has been excellent and the agency force is in place and enthusiastic about PIC.

Our financial results demonstrate that the application of our strategic plan has provided the foundation for PIC to continue upon its evolutionary path. We have come a long way in a relatively short period of time, but we are determined to see the company aspire to new heights.

The SMS World Wide Web Site: What's On it For You?

B-L Pellicore, Vice President, Communications



The World Wide Web has changed the way the SMS and many of its physician members, and their clinics and office managers, do business. Addressing the need to provide members with instant access to information and two-way communications is the primary goal of WISMED, the SMS web site.

From the beginning, this site has been carefully and specifically tailored to your needs as Wisconsin physicians, and to those of your patients. For almost a year now, we have been taking your comments, many of which are left by clicking on the "talk back" icon found on every page of WISMED, and implementing them to enhance the site to better meet your needs.

We've also been able to quickly answer a research or policy question you may have left in the message box (our goal is to respond within 24 hours). *For example:* When Scott in enhancing WISMED for our member users.

And now, we're planning to introduce a Members-only page on WISMED which will provide a value-added site for SMS members, that will allow you to gain access to legal, policy and Board documents, a membership directory, and much more.

Probably the best features of WISMED are its user-friendliness and comprehensive content. Consider it your "window on the world (wide web)." The point is, you don't have to "surf" anywhere else on the Internet to gain direct access to: medical news, trends and research; state and federal health care-related legislation; legal updates and assistance with contracts; even discussion groups and consultations with your peers, in Wisconsin and around the world!

Once you go to WISMED.COM you will find:

- From our Who We Are page, an up-to-date directory of SMS officials, Board members and staff, as well as a quick review of the Society's major activities.

- On the Membership page, you'll find an up-to-date report of what the SMS has done for you lately, brief resumes of the member relations and projects directors on staff – along with a county-by-county listing to help you easily find the right person to contact with your questions your concerns. (Just click on their e-mail addresses as listed, and you'll be linked directly to their in-box.)

  You'll also be able to review comprehensive SMS Membership benefits and information, and ways to get more involved in the SMS – including information on SMS Commissions and Task Forces and their most recent activities.

- On the Communications page, find all news releases from the SMS, the most recent pamphlets and brochures produced by SMS and its subsidiaries, as well as an on-line edition of *Medigram*, and theme-related excerpts from the most recent *WMJ*, along with all back-issues of 1997. (You can also link directly to *Medigram* and *WMJ* from the Home page by clicking on the icon for each one.)

- Healthcare Links will take you to myriad medical and association sites on the World Wide Web, through which you can gain direct access to research by specialty, instructional videos to download – even physician chat rooms in which you can post questions for direct response from your peers, or call up "transcripts" of past discussions on any given topic. Many of our member users have found the "Patient Information" sites found here to be very helpful when trying to explain an illness or procedure to patients in laymen's terms. You simply search for a key word or phrase, such as "Huntington's Chorea," and you will link directly to documents written in plain English, and displayed in easy-to-read formats, for downloading and printing – which you can give directly to your patients.

- What's New? gives you recent trends in Wisconsin health care, managed care activities of the SMS, the newest hot links to our site, and more.

- SMS Projects leads you to details about CME, Mini-Internship programs, the Physician Support Program and Statewide Physician Health Program, as well as the SMS Foundation's Medical Outcomes Research Project (MORP), from which you can derive reports on its recent Low Back Pain and Asthma studies, as well as links with other outcomes and quality assessments sites. You can also link to MORP from the SMS Foundation page.

- The News & Information page links you directly to all major and statewide news media sites, including USA Today, CNN, Microsoft/NBC, Fox News, the Washington Post, the Wall Street Journal, the New York Times, U.S. News & World Report, the Chicago Tribune, as well as the Milwaukee Journal-Sentinel, the Business Journal and Madison On-Line.

- From our Government Affairs page, you gain access to state legislative updates, information on WISPAC, and "hot links" to state and federal legislative sites, as well as to your representative's e-mail in-box.

- The Legal page gives you recent court rulings affecting Wisconsin physicians, help with managed care contracts including gag clauses, and "hot links" to other sites such as the Wisconsin Sate Bar Association and Wisconsin HMOs.

- Our Insurance Services page offers you specifics of the various plans available to SMS member physicians, clinics and hospitals, through SMS Insurance Services, Inc., a list of staff members and their responsibilities, and the monthly newsletter, *ServiceLine*.

- The Seminars page posts the entire year's calendar of SMS courses by topic, credit information, and even a way to register on-line.

- And every page has an appropriate staff person's e-mail address, linked so you can access their e-mail in-box in an instant.

As it has been over the past year since its inception, WISMED will continually change and grow, in response to current events, medical trends, legislative issues and, most importantly, to your comments – which you have an opportunity to provide on any page of the WISMED site, by simply clicking on our "talk back" icon.

So, come visit us soon. It's free, it's easy, and it's available to you any time, day or night. If you are not already on-line, please call Doug Turecek, Chief Information Officer, at **1-800-362-9080, ext. 335,** for information on an easy, and economical, way in which you can access the Internet.

SMS Departments

Business Services & Support

Jim Esselman, Chief Financial Officer

The primary activities of this group are: performing all necessary accounting tasks for the Society, the SMS Foundation, SMS Holdings Corporation and its subsidiaries; and financial and investment activities. Committees staffed by this department include: SMS Finance Committee of the Board; Reference Committee on Organization and Finances of the House; Employees' Pension Plan Managing Committee and Trustees; SMS Employees' Defined Contribution Plan Board of Trustees; and Investment Subcommittees.

In addition to the accounting, financial and investment responsibilities, this group also includes Facilities, responsible for the physical maintenance of the property; Claims Forms/Purchasing, which handles the sale of office forms; Lakedge Printing, a full-service printer and copy center; and Mail Services.

Communications - B-L Pellicore, VP

The Communications department has primary responsibility for media relations, public education and member communication on behalf of the SMS. Communications is heavily involved in: public health coalition programs such as the mini-internship program; Managed Care public information campaign; Workshop on Health; the Annual Meeting; and AMA election campaigns.

The Communications department plans and produces official SMS publications: the monthly *Wisconsin Medical Journal* and the bi-weekly newsletter, *Medigram*. In line with the SMS strategic plan to pursue high-technology communication, an SMS World Wide Web site (http://wwwwismed.com), was launched in September of 1996.

General Administration

John Patchett, JD, Executive Vice President

The General Administration area has overall responsibility for activities of the directors, officers, Wisconsin delegation to the AMA, the House of Delegates, commissions and task forces.

Human Resources - Barb Kopenski, Director

Responsible for all personnel issues including hiring, training and benefits.

Marketing, Development & Services - Linda Syth, VP

The Marketing, Development & Services group consists of: Marketing & Research, Educational Programs & Services, Endorsed Products/Programs, Physician Data, Meetings Management, and Continuing Medical Education.

Marketing & Research is dedicated to determining members needs and then helping the organization to respond to these needs. A membership census was sent to all members late last month. The results will help determine the strategic direction of the organization in the coming years.

Educational Programs & Services is responsible for practice management seminars and workshops, including in-house training and coding consultations for physician offices and assisting with coding and billing questions.

Physician Data is responsible for processing all dues statements, and supporting the Member Relations efforts in supporting our membership.

Meetings Management is responsible for planning, promoting and executing in excess of 350 meetings each year, including the Annual Meeting. Staff is also involved in the planning and development of other SMS programs including practice management seminars, AIDS education programs and such ongoing events as the Workshop on Health and other SMS-related functions.

The SMS is also the accreditation body for all Continuing Medical Education (CME) in the State of Wisconsin. A CME commission works with hospitals, specialty societies, county medical societies, and any other group wanting certification for their education opportunity.

Membership & Professional Relations

Maureen O'Brien, VP

Improving communication with members and receiving feedback from physicians, physician groups, hospitals and clinics is the focus of the Membership & Professional Relations department.

The member relations department also staffs the sections of Group Practice, Young Physicians and Medical Students, and International Medical Graduates.

One of the member relations specialists serves as a community projects director. This position is responsible for planning community health projects around the state.

Group practice/specialty society liaison works with groups and specialty societies to make certain that the SMS is meeting their membership needs, working together on issues whenever possible.

The operation of the SMS Alliance, an educational and charitable organization, is also part of the Membership & Professional Relations department. The goals of the Alliance include: assisting in those programs of the SMS that improve the health and quality of life for all people; promoting health education; encouraging participation of volunteers in activities that meet health needs; supporting health-related charitable endeavors; and coordinating and advising the activities of constituent alliances/auxiliaries.

Office of General Counsel
Mark Adams, VP & General Counsel

The Office of General Counsel consists of the SMS general and assistant general counsel and support staff. Among the review services offered are hospital medical staff bylaw, physician employment and managed care contracts and county medical society bylaw reviews. The legal staff receives roughly 200 questions a week concerning the many legal and ethical facets of medical practice. In addition, the legal staff represents the SMS in friend-of-the court briefs in selected cases before Wisconsin courts. The office also provides legal services to the SMS Board of Directors, commissions and staff, plus the SMS Holdings Corporation and its for-profit subsidiaries, including coordinating the use of outside legal counsel as required.

Peer review services housed within the office include the Statewide Physician Health Program, the Medicaid Medical Audit Committee which advises the State Division of Health, the Commission on Mediation and Peer Review, and liaison with MetaStar.

Public Affairs - Mike Kirby, VP

The SMS Public Affairs department is responsible for the combined activities of Government Relations, Policy & Research, Quality Improvement, and WISPAC, the Society-sponsored political action committee.

Government Relations bears primary responsibility for representing the Society before the state and federal governments. Government Relations is also responsible for the political action, candidate support, and political education activities carried out by the Society and by WISPAC.

Government Relations staff reviews and analyzes proposed legislation and administrative rules; formulates legislation to carry out the Society's legislative initiatives; and develops modifications to proposed legislation or regulations to achieve the Society's objectives or resolve concerns on specific issues. Government Relations staff also researches legislative and regulatory issues and develops position papers, testimony, and other materials for use in explaining and advocating for the Society's position.

The Policy & Research area is responsible for issues management and analysis, liaison outside the Society with various government agencies and health care organizations, and staff support to a number of SMS commissions, task forces, and working groups.

WISPAC, Wisconsin Physicians Political Action Committee, and Physicians for Better Government, are operated by a board of directors and a managing committee.

Strategic Information Systems & Technology - S.I.S.T.
Doug Turecek, Chief Information Officer

Previously known as Management Information Systems (MIS), Strategic Information Systems & Technology is a support group for Society staff, SMS Holdings staff and Society members. This area serves a vital role in providing the tools for efficient and effective information flow.

SMS Foundation - Julie Hein, Executive Director

The SMS Foundation was chartered by the SMS in 1955 as a non-profit, non-stock corporation to enable physicians and other friends of the profession to support, through gifts and grants, projects vitally affecting scientific medicine and public health. The Foundation's scope of interest has grown because of estate gifts received; therefore, a number of worthy programs affecting medical education and health care needs in Wisconsin can be accomplished. The future of the Foundation holds an array of opportunities and challenges.

Started in 1995, the Medical Outcomes Research Project (MORP) is the culmination of four years of study of the best medical quality assessment and improvement models available. Through its Medical Quality Research Council and condition study groups, the Project strives to provide a neutral forum for physicians to design outcomes studies and engage in data collection, analysis, and dissemination of outcomes research.

SMS Holdings
Dave Kemp, President & Chief Operating Officer

SMS Insurance Services, Inc. - Mike Dolan, President

SMS Insurance Services, Inc. is a member of SMS Holdings, a subsidiary of the SMS.The only Wisconsin-based, physician-owned insurance firm exclusively serving the state's medical community, the sole mission is meeting the insurance needs of Wisconsin physicians, hospitals, clinics, related health care providers, their
employees and families. With a staff of over 50 licensed specialists throughout the entire state, SMS Insurance Services has grown to be one of the Top 10 independent agencies in Wisconsin.

Lakeside Association Services, Inc.
Eric Ostermann, Executive Director

Established in 1987, Lakeside Association Services, Inc., LASI, began working primarily with medical specialty societies and has since grown into the headquarters for numerous health-related organizations, county medical societies, and other non-profit groups. Currently representing nearly 15,000 members with clients ranging in size from 25 to 2,000 members, LASI offers expertise and assistance in a wide variety of areas and can provide any association with quality, efficient, cost-effective services.

Staff E-Mail Directory

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Dan McClure	DANM@smswi.org
Pat Westberg	PATW@smswi.org

SMS Staff Directory

Timely, accurate information is essential in our complex, rapidly changing medical environment. Information — when you need it — on scientific issues, legislative issues, and socio-economic issues is available from the SMS headquarters in Madison.

This SMS staff directory is provided as a brief reference guide to assist you in locating the resource person on the SMS staff who is best able to answer your questions on a wide variety of topics.

Simply call (800) 362-9080 or (608) 257-6781 for immediate access to this valuable membership resource.

A

Accounting ..... Jim Esselman
Accreditation (CME) ..... Kristin Krueger/Lisa Lawry
Addictive Diseases, Commission on ..... Anne Bicha/ Karen Baier
Administrative rules ..... Colleen Wilson
Advance medical directives ..... Kalisa Barratt/Colleen Wilson
Advertising,
Wisconsin Medical Journal ..... Michelle Koehler
AIDS, Task Force on ..... Lynn Sherman/Karen Baier
Alliance, SMS ..... Maria Van Cleve/Karen Butler
Allied health professionals ..... Kalisa Barratt
Alternative delivery systems ..... Kalisa Barratt/Kevin Wymore
American Medical Accreditation
(AMAP) ..... Sally Wencel
AMA Delegation ..... John Patchett/Margaret Wiersum
Americans with Disabilities Act ..... Kalisa Barratt
AMPAC ..... Mike Kirby
Annual meeting ..... Kristin Krueger
Antitrust Mark Adams

B

Beaumont 500 Club ..... Julie Hein
Bequests Julie Hein
Blood-borne Pathogen Standards ..... Lynn Sherman/ Kalisa Barratt
Board of Directors ..... John Patchett/Margaret Wiersum
Bureau of Quality Compliance ..... Lynn Sherman
Bylaws: CMS, hospital medical staff ..... Kalisa Barratt

C

Candidate interviews ..... Peggy Partenfelder/Mike Kirby
Capitol Update ..... Kathy Andersen
Chiropractic ..... Colleen Wilson
CHILD SAFE ..... Lynn Sherman/Eric Ostermann
Charitable, Educational & Scientific
Foundation (CESF) ..... *see SMS Foundation*
Claim forms (HCFA) ..... Bill Guerten
Clinical Laboratory Improvement
Act (CLIA 88) ..... Kalisa Barratt/Tamara Larson
CME, accreditation ..... Kristin Krueger/Lisa Lawry
Coding ..... Patricia Feldner
Confidentiality ..... Kalisa Barratt/Sonia Porter
Commissions, appointments and
reappointments ..... Noreen Krueger
Communications ..... Judith Burke
Complaints about medical care ..... Sonia Porter/Anne Bicha
Computers ..... Doug Turecek
Congress ..... Mike Kirby
Consent and related issues ..... Kalisa Barratt
Continuing Medical Education,
Commission on ..... Kristin Krueger/Lisa Lawry
Contract review ..... Kalisa Barratt
Copy center and printshop ..... Dave Conner
Cost Containment ..... Kevin Wymore
County medical society
outreach ..... Membership and Professional Relations

D

Desktop publishing ..... Vicki Meyer
Domestic violence ..... Lynn Sherman

E

Economic credentialing ..... Kalisa Barratt
Elderly issues ..... Lynn Sherman
Emergency medical services (EMS) ..... Lynn Sherman
Endorsed programs ..... Karen Garrett
Endowment Funds ..... Julie Hein
Environmental and Occupational
Health Commission ..... Lynn Sherman/Karen Baier
Ethical opinions ..... Kalisa Barratt
Ethics and Medicine, Commission on ..... Maria Van Cleve
Executive Committee ..... John Patchett/Margaret Wiersum

F

Facilities manager ..... Don Temby
Farm safety ..... Lynn Sherman
Federal legislation ..... Mike Kirby
Federal Register ..... Policy analysts
Fifty-Year Club ..... Lisa Lawry
Finance Committee ..... Jim Esselman/Sally Frankey
Fraud and abuse — safe harbors,
physician self-referral ..... Kalisa Barratt

G

Gambling addiction ..... Anne Bicha
Geriatric Health,
Commission on ..... Lynn Sherman/Merry Earll
Golf Classic (SMS Foundation) ..... Julie Hein
Governance Task Force ..... Colleen Wilson
Governmental Affairs,
Commission on ..... Colleen Wilson/Judy Frey
Gun violence and safety ..... Lynn Sherman

H

HCFA (claim) forms sales ..... Bill Guerten
Health care economics ..... Kevin Wymore
Health Care Financing and Delivery,
Commission on ..... Kevin Wymore/Merry Earll
Health Care Information,

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Office of (OHCI) ..... Anne Bicha
Health care rationing ..... Anne Bicha
Health care reform ..... Colleen Wilson
Health insurance ..... Anne Bicha/Lynn Sherman/ Kevin Wymore
Health law ..... Mark Adams/Kalisa Barratt
Health maintenance organizations (HMOs) ..... Kevin Wymore/Anne Bicha
Health professional shortage areas (HPSAs) ..... Anne Bicha
Healthy Start ..... Kevin Wymore
Hepatitis B vaccinations ..... Kevin Wymore
Home health care ..... Lynn Sherman
Hospice care ..... Lynn Sherman
Hospitals — regulation, accreditation, privileges ..... Kalisa Barratt
Hospital/Organized Medical Staff Section ..... Anne Bicha
House of Delegates ..... Mark Adams/Margaret Wiersum
Human Resources ..... Barb Kopenski/Jane Wright

I

Impaired physicians ..... Sonia Porter/ John LaBissoniere
Individual practice associations (IPAs) Kevin Wymore
Information systems ..... Doug Turecek
Injury Prevention and Control, Commission on ..... Lynn Sherman/Karen Baier
Insurance, Office of the Commissioner of ..... Anne Bicha
Insurance plans ..... see SMS Insurance Services
Integrated delivery services ..... Kevin Wymore
International Medical Graduates Section ..... Maureen O'Brien
Internet/Internet Access Services ..... Doug Turecek
Interprofessional code ..... Mark Adams

J

Joint Commission on Accreditation of Health Care Organizations ..... Kalisa Barratt/Anne Bicha

K

Key contact system ..... Mike Kirby

L

Label requests and sales ..... Joyce Pease
Lakedge Printing ..... Dave Conner
Lakeside Association Services, Inc. (LASI) Eric Ostermann
Legal counsel ..... Mark Adams/Kalisa Barratt
Legislation ..... Mike Kirby/ Kathy Andersen/Colleen Wilson
Legislative Directory ..... Judy Frey
Legislative issues booklet ..... Mike Kirby
Liability insurance regulations ..... Mark Adams/Anne Bicha
Licensure ..... Kalisa Barratt/Colleen Wilson
Living wills ..... Kalisa Barratt/Colleen Wilson
Lobbying Mike Kirby/ Kathy Andersen/Colleen Wilson

M

Mailroom ..... Dave Conner
Managed care ..... Mark Adams/Kalisa Barratt/ Anne Bicha/Kevin Wymore
Managed Care Subcommittee ..... Anne Bicha/ Karen Baier
Marketing & Research ..... Linda Syth
Maternal and Child Health, Commission on ..... Kevin Wymore/Merry Earll
Media relations ..... Judith Burke
Mediation and Peer Review, Commission on ..... Anne Bicha/Sonia Porter
Mediation panels ..... Mark Adams/Anne Bicha
Medicaid (Title 19) ..... Kevin Wymore/Patricia Feldner
Medicaid Medical Audit Committee ..... John LaBissoniere/Sonia Porter
Medical Assistance Technical Advisory Committee ..... Kevin Wymore/Merry Earll
Medical Business Specialist Certificate Program ..... Karen Garrett/Elaine Stern
Medical Examining Board (MEB) ..... Kalisa Barratt/ Colleen Wilson
Medical liability ..... Mark Adams/Anne Bicha
Medical Liability and Risk Management, Commission on ..... Anne Bicha/Karen Baier
Medical Network Specialist ..... Vacant
Medical Outcomes Research Project (MORP) ..... Sally Wencel/ Mark Meaney/Lynne Thomas
Medical records ..... Kalisa Barratt/Sonia Porter
Medical residents ..... Maureen O'Brien
Medical service organizations ..... Kevin Wymore
Medical Student Section ..... Tawana Cooper/ Maureen O'Brien
Medicare audits ..... Tamara Larson
Medicare (Title 18) ..... Anne Bicha/Tamara Larson
Medicare coding ..... Tamara Larson
Medicare Supplemental/ Medigap ..... Tamara Larson/Anne Bicha
Medicine and Ethics, Commission on ..... Maria Van Cleve/Karen Butler
Medigram ..... Judith Burke
Meeting planning ..... Kristin Krueger
Membership and Professional Relations ..... Tawana Cooper James Reuter/Steve Tylicki
Membership Recruitment and Retention ..... Maureen O'Brien
Milwaukee office ..... Mary Thompson
Memorial giving program (SMS Foundation) ..... Julie Hein
MetaStar ..... Anne Bicha
Mini internship program ..... Tawana Cooper

MetaStar ..... Mark Adams
MinnesotaCare ..... Mark Adams

N

National Practitioner Data Bank ..... Kalisa Barratt/ Anne Bicha
News Clippings ..... Lynne Thomas
Nominating Committee ..... Margaret Wiersum

O

Occupational health ..... Lynn Sherman
Occupational Safety and Health Act (OSHA) ..... Lynn Sherman/Kalisa Barratt
Occupational Health Guide ..... Julie Hein/Lynn Sherman
OCI ..... Anne Bicha
Optometry ..... Colleen Wilson
Organ transplants ..... Maria Van Cleve
Outcomes management ..... Sally Wencel/Mark Meaney

P

PartnerCare ..... Tamara Larson
Patients Compensation Fund (PCF) ..... Mark Adams/ Anne Bicha
Peer review ..... Kalisa Barratt/Anne Bicha
Pharmacy ..... Kalisa Barratt/Colleen Wilson
Physician Health Program, Statewide ..... John LaBissoniere/Sonia Porter
Physician Data ..... Joyce Pease/Lori Sherman
Physician hospital organization (PHO) ..... Mark Adams
Physician income statistics ..... Mark Adams/Anne Bicha
Physician organizations (PO) ..... Mark Adams
Physician profiling ..... Kalisa Barratt
Physician recruitment ..... Maureen O'Brien
Physician support program ..... Anne Bicha/Karen Baier
Physicians for Better Government (PFBG) ..... Peggy Partenfelder/Mike Kirby
Physician's Guide to Wisconsin Health Law ..... Kalisa Barratt/ Sonia Porter
Political action ..... Peggy Partenfelder
Policy compendium ..... Maria Van Cleve
Pooled income fund ..... Julie Hein
Power of attorney for health care ..... Kalisa Barratt/ Colleen Wilson
Practice guidelines/parameters ..... Sally Wencel/ Mark Meaney/Anne Bicha
Practice management seminars ..... Karen Garrett/Elaine Stern
Preferred provider organizations (PPOs) ..... Kevin Wymore
Primary Care Consortium ..... Lynn Sherman
Professional review organizations (PROs) ..... Anne Bicha
Public health ..... Lynn Sherman/Tawana Cooper
Public Information, Commission on ..... Judith Burke

Q

Quality Compliance, Bureau of ..... Lynn Sherman

R

Regulation & Licensing, Department of (DRL) ..... Colleen Wilson
Report cards (physician profiles) ..... Sally Wencel/ Mark Meaney
Resident Physician Section ..... Maureen O'Brien
Resource Based Relative Value Scale (RBRVS) ..... Tamara Larson/Anne Bicha
Risk management ..... Mark Adams/Kalisa Barratt
Rural health ..... Anne Bicha/Mike Kirby

S

Safe transportation ..... Lynn Sherman
SCAN ..... Maria Van Cleve
School health ..... Kevin Wymore
Scope of practice ..... Kalisa Barratt/Colleen Wilson
Scholarship program (SMS Foundation) ..... Jane Anderson
Scientific Medical Education Program ..... Kristin Krueger/Lisa Lawry
Self-referral ..... Kalisa Barratt
Seminars program ..... Karen Garrett/Elaine Stern
Senior Physicians, Wisconsin Association of ..... Julie Hein
ServiceLine ..... Teresa Schildt
SMS Foundation ..... Julie Hein
SMS Holdings ..... David Kemp
SMS Insurance Services, Inc. ..... Mike Dolan
- Auto/Home ..... Kelly Kleist
- Dental ..... Erin Moran
- Group Plans ..... Joe Hinkes
- Health ..... Joe Hinkes
- Professional Liability ..... Alice Ballweg
- Business Insurance ..... Bob Borland
- Life, Disability and all others ..... Sandie Robb
- General Information ..... Mike Dolan

Speakers bureau ..... Tawana Cooper
Specialty sections and societies ..... Michelle Kniess
Speech writing (officers) ..... Judith Burke
Stark laws ..... Kalisa Barratt
Strategic plan ..... David Kemp
Student loan program (SMS Foundation) ..... Jane Anderson

T

Third-party payors ..... Mark Adams/Kevin Wymore
Tobacco and health ..... Lynn Sherman/Kathy Andersen
Tobacco Free Wisconsin Coalition ..... Lynn Sherman/Kathy Andersen
Tort reform ..... Mark Adams/Anne Bicha

U

Usual, customary and reasonable fees (UCR) Anne Bicha/Kevin Wymore
Utilization review ..... Kalisa Barratt

Continued on next page

Continued from preceding page

W

W-2 ..... Kevin Wymore
WHCLIP/PCF Board of Governors ..... Mark Adams
Wisconsin Administrative Code ..... Colleen Wilson
Wisconsin Medical Journal ..... Judith Burke
Wisconsin Health Care Liability Insurance Plan (WHCLIP) ..... Mark Adams
WISMED/Web Site ..... Judith BurkeDoug Turecek
WISPAC ..... Mike Kirby/Peggy Partenfelder
WNA-SMS Liaison, Commission on ..... Anne Bicha/Karen Baier
Worker's Compensation ..... Mark Adams/Mike Kirby/Lynn Sherman
Workshop on Health ..... Maria Van Cleve
WPS Medicare ..... Tamara Larson/Anne Bicha

Y

Young Physicians Section (YPS) ..... Maureen O'Brien/Merry Earll

SMS staff members (left to right): Mike Kirby, VP Public Affairs; Kalisa Barratt, Assistant General Counsel; Judith Burke, Managing Editor, Publications; Maria Van Cleeve, Director SMS Alliance; and Jeremy Pittenger, Communications Specialist, at Presidential Inaugural celebration.

SMS HOLDINGS CORPORATION · SMS INSURANCE SERVICES INC. · MEMBER

SMS

INSURANCE SERVICES, INC.

BUSINESS INSURANCE

WORKER'S COMPENSATION

PROPERTY & CASUALTY

ERRORS & OMISSIONS

UMBRELLA LIABILITY

DIRECTORS & OFFICERS LIABILITY

EMPLOYMENT RELATED PRACTICES LIABILITY

EMPLOYEE BENEFITS

GROUP HEALTH

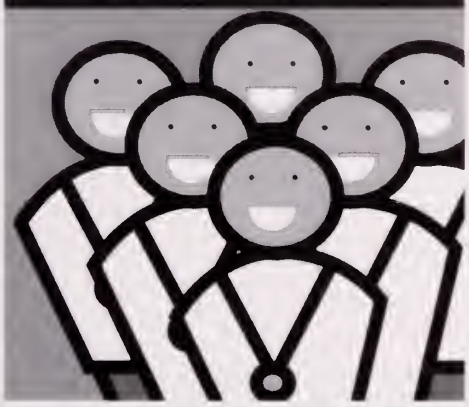
GROUP LIFE

GROUP DENTAL

GROUP VISION

GROUP DISABILITY INCOME

VOLUNTARY PRODUCTS



PROFESSIONAL LIABILITY

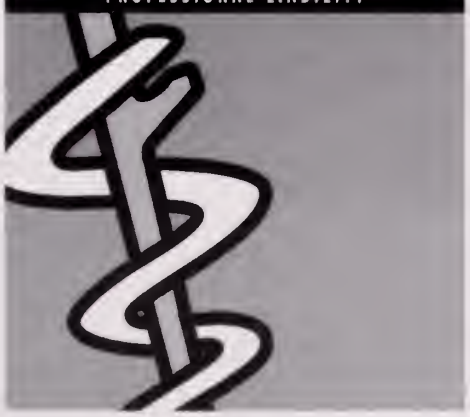
HOSPITAL PROFESSIONAL

MEDICAL PROFESSIONAL

ENTITY PROFESSIONAL (CORPORATE)

DIRECTORS & OFFICERS

CAPITATION-MANAGED CARE



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1997 House Action on Board Requests, Resolutions

1997 Reference Committees

State and National Issues
Vijay V. Kulkarni, MD, Milwaukee, Chair
Sara Arnold, MD, West Allis
William J. Henry, MD, Wisconsin Rapids
David M. Hoffmann, MD, Mauston
Richard W. Shropshire, MD, Monona

Socioeconomic Activities
John R. Petersen, MD, Wauwatosa, Chair
Richard A. Dart, MD, Marshfield
Lucille B. Glicklich-Rosenberg, MD, Milwaukee
Richard S. Kane, MD, Milwaukee
Roland R. Liebenow, MD, Lake Mills
Richard D. Lindgren, MD, Madison

Scientific Activities
Ali K. Choucair, MD, Marshfield, Chair
James D. Buck, MD, Milwaukee
Robert K. DeMott, MD, Green Bay
Kay A. Heggestad, MD, Madison
Kesavan Kutty, MD, Milwaukee
James T. Paloucek, MD, Milwaukee
Frank J. Salvi, MD, Cottage Grove
David R. Weber, MD, Fond du Lac

Resolution 1 directs the SMS to work to repeal the statutory penalties for failure to comply with data collection requirements of the Office of Health Care Information and to assist legislators in drafting health care laws that are fair and reasonable. **Action:** substitute resolution adopted.

Resolution 2 directs the SMS to cease and desist efforts to raise the amount of primary liability insurance a physician must carry from $400,000/$1 million to $1 million/$3 million. **Action:** not adopted; current policy supporting raising the threshold to $1 million/$3 million allows for more efficient legal representation and further addresses the effect of inflation.

Resolution 3 directs the SMS to work to make the Patients Compensation Fund voluntary, or eliminate it, and further directs the Society to pursue legislation that would require the state of Wisconsin to solicit voluntary contributions to retire the Fund deficit. **Action:** not adopted; Board of Directors Report A: Patients Compensation Fund Study represents better policy.

Resolution 4 directs the SMS to pursue legislation to make Wisconsin's insurance commissioner an elected office. **Action:** not adopted; changing the position to that of an elected official would not resolve the issue of a perceived lack of responsiveness.

Resolution 5 directs the SMS to pursue legislation to prevent the unauthorized review of patients' medical records without the written consent of the individual patient for each occasion of medical record review. **Action:** referred to the Board of Directors.

Resolution 6 provides that the reviewer's name and signature be recorded in the patient's chart whenever care is reviewed and acceptance, denial and/or direction of treatment is recommended, and further directs the Society to support legislation to hold reviewers equally liable for their part in patient care outcome in cases where reviewers have made recommendations or issued directives. **Action:** referred to the Board of Directors.

Resolution 7 directs the SMS to: pursue changes in the Veterans Administration System whereby veterans living in rural areas of Wisconsin have a choice of receiving their care through the Veterans Administration System or their local rural hospital; urge Congress to transfer the funding of such care from the Veterans Administration system to the Medicare system in Wisconsin; and, seek a cost comparison study of transferring such care from the Veterans Administration Hospital facilities to rural hospital facilities. The resolution also provides that the delivery of health care to veterans be monitored to serve as a possible solution to the availability of health care resources in Wisconsin. **Action:** referred to the Board of Directors.

Resolution 8 calls the SMS to seek state profiling and professional specific data on all health care professionals licensed by the state of Wisconsin and to work with the state and professional associations representing limited license health care professionals to develop the data collection sets used in compiling a public profile of a licensed professional. **Action:** referred to the Board of Directors.

Resolution 9 calls for the SMS to review, revise and resubmit the 1993 Wisconsin Care Plan ensuring access to health care services for all Wisconsin residents. **Action:** referred to the Board of Directors.

Resolution 10 calls for the SMS to create a task force that includes young physicians and residents to define medical practice in Wisconsin and to create model legislation to define and prohibit medical practice by corporations, entities and people not licensed by the state from practicing medicine in Wisconsin. **Action:** referred to the Board of Directors.

Resolution 11 calls for the SMS to reject Wisconsin Care and any other plan that imposes centralized bureaucratic control over the health care system, to reaffirm support for a pluralistic system of health care financing and to actively promote individually owned insurance as a preferable option to employer-sponsored plans. **Action:** not adopted; current policy supports "Wisconsin Care" which includes the option for a pluralistic system.

1997 Reference Committees

Organization and Finances
Joseph C. DiRaimondo, MD, Manitowoc, Chair
Gregory B. Buck, MD, Wauwatosa
William E. Raduege, MD, Woodruff
Robert B. Shapiro, MD, Madison
Daniel R. Sherry, MD, Ellsworth
Ron H. Stark, MD, Milwaukee
Armond H. Start, MD, Madison
Carol E. Young, MD, Milwaukee

Credentials
Robert T. Cooney, MD, Portage, Chair
Jerome A. Esser, MD, Waukesha
Wesley E. McNeal, MD, Green Bay

Resolution 12 calls for the SMS to send a delegation of physicians to their United States Senators and request that legislation be sponsored to allow a physician accused of Medicare fraud and abuse to obtain information, upon request, about the physician rendering the expert opinion in the case and that the accused physician have the ability to cross examine that physician at the level of appeal. **Action:** referred to the Board of Directors.

Resolution 13 calls for the SMS to discontinue the use of the word "provider" when referring to physicians in official SMS literature, to encourage other state medical specialty societies and the medical schools to not use the word "provider" and to submit this request to the AMA June 1997 House of Delegates meeting. **Action:** Amended Substitute Resolution 13 adopted.

Resolution 14 calls for the SMS to oppose the establishment of any new national credentialing body, including the AMA, and to oppose the use of economic requirements or any other requirement unrelated to medical competence as a condition for obtaining hospital privileges, managed care affiliations or licensure. **Action:** not adopted; conflicts with supporting the AMAP program.

Resolution 15 calls for the SMS to send a delegation of physicians to their United States Senators to request sponsorship of legislation so that decisions made by administrative law judges be precedent setting. **Action:** referred to the Board of Directors.

Resolution 16 directs the SMS to study the effect of HCFA actions on post graduate medical education. **Action:** adopted as amended.

Resolution 17 calls for the SMS to send a delegation to the United States Senators to urge them to introduce legislation to prevent physicians from being punished physician for violating the law and rules [of incorrect coding under the Health Insurance Portability Act of 1996] where no criminal intent was intended, that the SMS should obtain a voluntary contribution of $500 from each member for a legal defense fund to assist members accused of this violation and that the resolution be sent to each state medical society, the AMA and AAP. **Action:** not adopted.

Resolution 18 directs that SMS offer to nominate physicians to a panel that would provide medical professional advisors to objectively evaluate and help categorize grievances regarding health benefit plans and managed care organizations in partnership with the Office of the Commissioner of Insurance of the state of Wisconsin. **Action:** substitute resolution adopted:

Resolution 19 directs the Society in essence to actively oppose any attempt by any agency to force a physician to adhere to clinical guidelines based on less than "Level A" evidence. **Action:** referred to Board of Directors.

Resolution 20 Partial Birth Abortion - withdrawn.

Resolution 21 calls for the Society to retrieve closed and settled medical malpractice claims and maternal death information from the Office of the Commissioner of Insurance and that the Wisconsin Society of Obstetrics and Gynecology/Wisconsin Section-American College of Obstetrics and Gynecology use the information for educational and quality improvement purposes. **Action:** substitute resolution adopted.

Resolution 22 directs the Society to oppose any legislation that would prescribe or proscribe a particular surgical approach to any specific clinical situation. **Action:** referred to the Board of Directors.

Resolution 23 directs the Society to publish yearly, all business connections to managed care entities that are disclosed by Society leaders. **Action:** not adopted because conflict of interest reports are filed at Society headquarters.

Resolution 24 would have required the SMS House of Delegates to approve removal of membership requirements for purchase of PIC Wisconsin malpractice insurance. **Action:** not adopted.

Continued on next page

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House of Delegates Nominating Committee: 1997-98

District 1

Lucille B. Glicklich-Rosenberg, MD
3431 N Lake Dr
Milwaukee 53211

George R. Schneider, MD
9330 W Lincoln Ave
West Allis 53227

Timothy G. McAvoy, MD
1751 E Main St
Waukesha 53186, chair

Thomas A. Reminga, MD
1251 W Glen Oaks Ln
Mequon 53092-3356

Clarence P. Chou, MD
10028 N Miller Dr, 2W
Mequon 53092-6186

Gregory A. Shove, MD
3807 Spring St
Racine 53405

Frank H. Urban, MD
3645 Emberwood Dr
Brookfield 53005

District 2

Robert A. McDonald, MD
1714 Camelot Drive
Madison 53705

Jerry M. Ingalls, MD
2630 22nd Ave
Monroe 53566

Paul A. Wertsch, MD
4221 Venetian Ln
Madison 53704, chair

District 3

Mark H. Andrew, MD
Vernon Memorial Hospital
507 S. Main St
Viroqua 54665, secretary

Resolution 25 reaffirms Society support of county medical society membership in the county where the physician's principal practice is located. **Action:** not adopted since this is current Society policy.

Resolution 26 requires the SMS to draft a letter of support for state funding of the development of sustainable home visiting programs for the prevention of child abuse and neglect and further directs the society to track and advocate for legislation supporting or funding such programs. **Action:** adopted as amended.

Late Resolution 27 directs the SMS to work with legislative and philanthropic organizations to increase the level of support for developing the infrastructure for practice-based and primary care research and improve the accessibility of the funding stream for specific projects in practice-based and primary care research. **Action:** adopted.

Resolution 28 directs that the state health officer qualifications include a license to practice medicine and surgery with training and experience in public health administration and leadership. **Action:** adopted as amended.

Late Resolution 29 directs that SMS develop and distribute a pamphlet informing its membership about the existence of a Food and Drug Administration toll free number which can educate patients about efforts to prohibit the sale of tobacco to minors. **Action:** adopted as amended.

Late Resolution 30 calls for the Society to work with the Medical Examining Board to change its current policy of focused continuing medical education audits to the statutory obligation of random audits. **Action:** adopted.

Late Resolution 31 directs the Society to vote on whether partial birth abortion is honorable and acceptable and to declare that the Society no longer anticipates that all physicians will adhere to the Oath of Hippocrates. **Action:** substitute resolution adopted.

Late Resolution 32 directs the Society to work with Department of Health and Family Services, other state regulatory bodies and the State County Coroner System to allow physician notification to occur the next day or next working day following a hospice patient's death. **Action:** not adopted; this issue is best handled on a local level with increased communication channels between physicians and county coroners.

Late Resolution 33 directs the Society to petition the Pharmacy Examining Board to interpret Administrative Rule, Phar 7.0(1)(e) and ask that it communicate its interpretation to pharmacists in order to prevent patients from being frightened into not taking their medications. **Action:** adopted as amended.

Late Resolution 34 directs that SMS affirm, commend, endorse the action and publish the policy statement of the Wisconsin Academy of Family Physicians and the Wisconsin Society of Obstetrics and Gynecology/Wisconsin Section of the American College of Obstetricians and Gynecologists to improve relationships between the two specialties. **Action:** adopted as amended.

Late Resolution 35 directs that SMS communicate to the Wisconsin State Superintendent of Public Instruction a request for greater attention to sleep hygiene in the educational programs for teachers, counselors, parents and children and specific guidance be offered by recommending to school districts to delay high school starting times more in line with sleep patterns of adolescents. **Action:** adopted as amended.

Board of Directors Reports

House of Delegates: Nominating Committee: 1997-98

District 4

Ali K. Choucair, MD
Marshfield Clinic
1000 N Oak Ave
Marshfield 54449-5777

Robert J. Jaeger, MD
3291 Thompson Ct
Stevens Point 54481

District 5

Kevin F. Quinn, MD
1147 Glenayre
Neenah 54956

Johan A. Mathison, MD
712 Doctors Ct
Oshkosh 54901

District 6

Joseph C. DiRaimondo, MD
1636 Miriam Rd
Manitowoc 54220

District 7

Charles V. Ihle, MD
836 Richard Dr
Eau Claire 54701

District 8

Modesto M. Ferrer, MD
RR 2, Box 2750
Hayward 54843-9475

Specialty Sections

Richard S. Kane, MD
945 N 12th St
PO Box 17932
Milwaukee 53217

Reports A and AA referred to state and national issues and included sections on: standard qualifications for expert witnesses; extension of malpractice exemption for charity care; Patients Compensation Fund study; payment for interpreter services for the hearing impaired; primary enforcement of the safety belt law; guidelines for uncontrolled sleep disorders and driving; driver safety laws; malpractice liability and managed care; "Wisconsin Works" (W-2) welfare reform legislation, tax exempt status of hospitals and other organizations, fire safe cigarettes. **Action:** adopted recommendations outlined by the Board of Directors.

Board of Directors Report A, Section on SMS 10-Year Policy Update: Mediation of Medical Liability Claims. **Action:** referred to the Board of Directors.

Reports B and BB referred to socioeconomic activities and included sections on: the Patient Protection Act, managed care, patient education campaign regarding managed care; willing provider statute for physicians in Wisconsin; ethics and practice parameters, American Medical Accreditation Program. **Action:** adopted recommendations outlined by the Board of Directors.

Vijay Kulkarni, MD.

Report B, section on SMS 10 Year Policy Review, Medicaid HMO Open Enrollment. **Action:** deleted from SMS Policy Compendium

Reports C and CC referred to scientific activities and included sections on: managed care formularies; implementing clinical guidelines; government practice guidelines; domestic violence prevention training in medical school and post-graduate education; organ donor program; teaching reproductive health education in Wisconsin schools; SMS 10-year policy update on mandatory continuing medical education, implementing clinical guidelines. **Action:** adopted recommendations outlined by the Board of Directors.

Report D referred to organization and finances and included sections on: 1998 dues recommendation, SMS conflict of interest policy; enhancing relationships with PIC Wisconsin, constitutional amendment on Resident physician Board of Directors seat, 1997 budget. **Action:** section on budget filed; remainder of recommendations outlined by the Board of Directors adopted.

Susan Turney, MD, PeterMcCabe, MD, Richard Roberts, MD, JD, and Sandra Osborn, MD.

Dr. and Mrs. Kenneth Viste, Jr. with Dr. and Mrs. Thomas Reardon.

Sheldon Wasserman, MD, with medical student Tiera Nell.

Cyril "Kim" Hetsko, MD, at the Packer Hall of Fame.

Dr. and Mrs. Albert Motzel with Jerry Kempthorne, MD.

Richard Ulmer, MD, and Mark Belknap, MD.

Greg Buck, MD, Janet Treacy, William Treacy, MD, and Kesavan Kutty, MD.

Henry Rabr, MD, and Wesley McNeal, MD.

John Beasley, MD and William Rock, MD.

Dr. and Mrs. Robert Shapiro with Bea Kabler.

President's Report to HOD

Richard H. Ulmer, MD

Richard H. Ulmer, MD
President, 1996-1997

I have enjoyed my year as your President. It has been a year of transition which we as an association have successfully traversed.

Our State Medical Society is completing a very eventful and interesting year. Last year at our Annual Meeting, we listened to the final EVP report from Tom Adams who left SMS Wisconsin after a 10-year term as our lead administrator. The EVP Selection Committee, under the direction of Board Chair doctor Ray Zastrow, worked diligently screening applications and interviewing candidates, and chose John Patchett, JD, as our new EVP.

John has been setting mileage records in his first seven months on the job, criss-crossing the state to meet with physicians at county medical society meetings and meeting with physicians and administrators at multiple group practice organizations across the state.

Jim Paxton, our former Deputy EVP, who had capped his eight-year career at SMS by negotiating with Bill Montei of PIC Wisconsin the details of the proposed PIC Wisconsin share exchange that will be discussed at the meeting and voted upon here, left SMS this past January to join Tom Adams at MGMA.

And Lee Johnson retired at the end of 1996 ending his more than 30-year career with SMS and SMS Holdings Corporation. Mr. Patchett has hired David Kemp who comes to us with an MBA and a long background in the banking industry to serve both as Deputy EVP and the Chief Operating Officer of SMS Holdings.

Our leadership team has been reconstituted and the Society can count on the staff to continue its long tradition of excellence and responsiveness in carrying out the policies and directions of this House of Delegates and the Board of Directors elected by the delegates.

At the February meeting of the Board in Madison, Wisconsin Attorney General James Doyle addressed the Executive Committee and then asked for Board support of a suit to be filed by the state of Wisconsin against the tobacco companies to recover the cost of Medicaid health expenditures to treat tobacco-related illnesses. The Executive Committee, and then the Board, unanimously supported the request of Attorney General Doyle. Recent news reports speculate on negotiations between two of the major tobacco companies and the states on a proposed settlement in the range of $350 billion to be paid over 25 years from tobacco revenues as a settlement of the suit brought by a total of 23 states. May this be but the first step in a process that will ultimately lead to the tight regulation and/or banning of tobacco products in this country.

Over the course of the past six months, the SMS Task Force on Governance Structure has met to implement the suggestion made by Tom Adams at the 1996 Annual Meeting that the time had come to evaluate the organization of SMS and its governance. You have received their report and will be discussing the changes at a special meeting tomorrow at 1:00 p.m.

I refer you to my President's Page column in the March issue of *WMJ* for a discussion of the four ethical issues I raised in my Presidential Address in April, 1996 . Suffice it to say that progress has been made on all four issues.

I have enjoyed my year as your President. It has been an always interesting year, with many moments of considerable management excitement. It has been a year of transition which we as an association have successfully traversed. I believe we are well positioned to continue our role as advocates for our physician members and for the well-being of our patients. Thank you. ❖

Presidential Inaugural Address
The Lessons of Green Bay: Learning from the Packers

Sandra L. Osborn, MD

Sandra L. Osborn, MD
President, 1997-1998

As I have traveled around the state and talked with our colleagues, I find a reluctance, even a resistance, on the part of many to embrace this new technology. We are in the midst of an explosion. An explosion of technology that will dramatically change the way we practice medicine.

Thank you. Thank you for bestowing on me the highest honor in Wisconsin state medicine. I have always thought a life in medicine a privilege in itself. But, to be so recognized by one's peers is truly an honor. Before we talk about next year, I would be remiss – standing here in the Green Bay Regency Suites – if I didn't spend a moment talking about this year and our beloved Packers.

As many of you know, my passion is not the Packers. It is marathon running. Whether my three times in Boston or my eight in the Grandma's Marathon along the shore of Lake Superior in Duluth, I love to run. And when it comes to football, I confess, I am a fair-weather friend. A fair-weather friend who did, indeed, spend a January Sunday watching the Super Bowl.

And what I observed at that game is what I want to talk about this evening. I am sure you all saw that electrifying 99-yard return touchdown by Desmond Howard in the third quarter. But how many of you noticed that giant TV screen in the end zone? Did you see Desmond's ability to look behind him, while running ahead? Giving true meaning to having eyes in the back of your head. Oh, the marvels of this communications age. What a tool for the Packers; what a tool for us as physicians.

And, yet as I have traveled around the state and talked with our colleagues, I find a reluctance, even a resistance, on the part of many to embrace this new technology. We are in the midst of an explosion. An explosion of technology that will dramatically change the way we practice medicine. The Genome Project, genetic engineering, molecular biology, all will alter the way we diagnose and treat many diseases. Telemedicine, the Internet and the World Wide Web are dramatically changing the way information is delivered to doctors. The computer is here and we'd better log on.

And it's happening not just in the big cities and major medical centers like Madison and Milwaukee but also in Hurley and Hayward and Menominee and Mount Hope.

You know, in my office at the Dean Clinic there is a computer at the nurses' station. The nurses can access patient schedules and lab data at the touch of a key. They can save themselves and their physicians hours of sorting through paper, retrieving patient charts.

Saving time, saving steps, saving us.

How I envy those nurses. Each time, every time, I reach for my PDR, I thumb through that hefty tome for drug information. Each time I sift through my Nelson, my Oski, my Red Book, for enough details to make a proper diagnosis. Each time I trudge down the hall to retrieve a patient's chart. And how I look forward to the day when I have my own terminal, in my own office, when my *WMJ* and my countless other medical journals, my PDR, can all be reduced from reams of paper on my desk to CD-ROMs in my pocket, or electronic files on my computer. When, as happened recently, a newborn with a TSH of 251 needs my immediate attention, and I can, again, punch that computer key to call up her mother's medical records, the State Lab of Hygiene's latest informational bulletin, when I can bring treatment and comfort to that baby and her family in less time than it takes me now. When I can do a better job. Be a better doctor.

I am puzzled by why some others don't have the same enthusiasms. I am puzzled by the reluctance of some of our colleagues to embrace this new technology. Those same doctors who so eagerly embrace other new techniques that aid them in their offices and in their operating rooms. That aid them in helping their patients. Those same doctors who seem adverse to coming on-line, coming on board. Now, it's understandable that some of our colleagues may be reluctant to enter the cyberworld, because they simply don't know where to start, from knowing how to buy a computer, to finding the right service provider. I can relate, I was there only a year ago.

That's why it is the State Medical Society's goal, and my goal, to help you master the training and technology you need to see the computer, not as a threat, but as merely another valuable tool. Just as a stethoscope now feels so comfortable around your neck, the SMS is here to make sure the keyboard is just as comfortable at your fingertips.

Already the Society has put up a web site, WISMED, to give you a home page, indeed, a window on the world. And what is on that

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home page, what world? Around the clock, 365 days a year at www.wismed.com you have: medical society membership benefits, the *WMJ*, *the Medigram*, news coverage of the latest health care issues, legislative updates, legal references, court rulings affecting Wisconsin physicians, trends in Wisconsin managed care, the SMS seminar and meetings calendars, insurance information, consumer-friendly patient information you can download and print out for your patients, reference resources such as physician chat rooms and direct links to other medical sites on the World Wide Web, links to state and federal legislative sites, direct e-mail links to SMS staff and state and federal legislators.

Whew! I've been running for 21 years and even I don't have the lungs to say all of that in one breath. In other words, we're doing a lot.

Oh, and I forgot to mention, you can even find the starting time of this year's Grandma's Marathon if you want to come.

I also want to mention that if you get your dots and your coms confused, as I still do at times, or want to know more about the almost breathtaking amount of information available to you through the Internet, you can call B-L Pellicore or Doug Turececk, at SMS headquarters for some help. In fact, I hope you were able to stop by the WISMED demonstration they held today, they have mega-bytes of information on getting started, from how to buy a computer and contract with a service provider, to searching and using the Internet in the most effective – and efficient – way for today's busy physicians.

Now, we've been talking about how to better communicate, better connect with ourselves. But, let's return to our winning Packers again for a second lesson in communications.

Have you ever noticed how nobody in Wisconsin ever says "the" Packers? They always say "our" Packers? Maybe it's because we are part-owners, but maybe it's also because the Packers are so much a part of us. They are such an integral part of our communities, our lives. Witness Craig Hendrik, who has given time to Boys and Girls Club of Green Bay, Children's Hospital of Wisconsin, and is active with the Cystic Fibrosis organization, or Aaron Taylor, who is heavily involved in local community service and serves as spokesman for Cerebral Palsy Center in Green Bay, including work as a host of the annual Green Bay telethon. And he works with local American Heart Association. Or, lest we forget, the venerable Reggie White. You may have seen his United Way public service announcements aired during one of their football games, and he is personally and financially involved in the Urban Hope Initiative, a program that offers small business loans to operations locating in the inner-city and high-risk areas.

Or take a look at our SMS Alliance, whose very mission is to encourage participation of volunteers in activities that meet health needs and to support health-related charitable endeavors. On an annual basis, this group of SMS member spouses coordinates health education programs such as the Wisconsin Workshop on Health, an issue-oriented conference presented to over a thousand middle-schoolers, or the campaign against family violence: this year the Alliance will place anti-violence billboards in several major Wisconsin metropolitan areas during the month of October.

If you think about it from their perspective, or the viewpoint of those involved Packers, it's a matter of tithing, of giving back.

And that's a challenge I want to leave with you this evening. A challenge of heightening our efforts to give back to our communities. I would ask each of our physician members throughout the coming year to donate at least one hour of time to their communities. Collectively, we will be giving Wisconsin medicine a higher profile – a Packer profile.

And that's a challenge I want to leave with you this evening. I would ask each of our physician members throughout the coming year to donate at least one hour of time to their communities.

It's the idea, the concept of tithing. I'm an accidental tither, myself. My son Doug and his wife Darlene own a day-care center in Middleton. One day last year, Doug called and said, "Mom, I've got a kid with a rash and a fever. I can't decide whether to call the parents now or wait till five thirty."

So, I asked a few questions and gave him my best medical judgement. I helped my son and the child, the parents, and maybe even the child's physician. But even more, I helped my community. I contributed. I realized that it's one of countless ways we physicians can contribute, can give back, can tithe. And I continue to be available for his calls.

I also made a pledge to the Dane County Medical Society's Girl Scout mentoring program to help a scout explore her interest in medicine. This took one morning of my time and gave her a new view of a hospital and pediatrics office as she shadowed me that morning.

Many of you serve as school team physicians, soccer coaches, volunteer at homeless shelters or meals on wheels, read to nursing home residents, talk to PTA, Rotary and senior citizen meetings, serve on school and town boards, sing in church choirs, teach Sunday School, participate in community theater and the arts, volunteer to work for local candidates, travel outside our borders to bring medical services to third world countries.

I could go on and on. The list of opportunities to make a difference, to make our communities better, is endless. What I am asking each of you, my colleagues, the more than eighty-five hundred physicians in Wisconsin, to do this coming year is to be a physician tither. Pick a place where you can make a difference, make a contribution, and do it.

I started yesterday when the AMA's "Extinguisher" whom you all met at yesterday's Opening Session, and I visited an Ashwaubenon elementary school and talked with over 100 boys and girls in first, second and fourth grades. As Doctor Nola Know – that's *k-n-o-w*, I talked to them about the importance of just saying "no" – as in *n-o* – to tobacco.

And, SMS will be looking for other opportunities to bring the Extinguisher to your community, to let you play Doctor Know. To bring the message of tobacco's harm to your children.

And, we're going to be building that list, that litany of things we physicians can do, must do, if we are to give Wisconsin medicine a Packer profile.

I have been talking this evening about the concept of giving, of supporting our communities. I want to close by introducing and thanking those who over the years have been so generous in their support of me.

I'd ask that you please hold your applause till all have been introduced. And, I'd ask that you stand when your name is called.

First, Marsh Finner, my husband who has kept the home fires burning and allowed me to participate in organized medicine these many years. And, I mean that literally. When I drag home at the end of a long medical day, he always has a fire in the fireplace and a glass of White Zinfandel waiting. Thank you, Marsh.

Also, my day-care owners, Doug and his wife Darlene. And, my daughter Cathy Kangas, from the Twin Cities. And my office staff, who are like family, maybe because I spend more time at my office than at my home. Cheryl Hermanson and her husband Glen, and Marge Miller and her husband Harry.

My partners from Dean Clinic, and, those who gave me my start in medical association work, the physicians and spouses of the Dane County Medical Society, especially John LaBissioniere, who was executive director when I served as county president. And, the members of the state society's Board of Directors.

And, of course, the SMS staff who have worked with me these past few years. From Tom Adams, Jim Paxton, Lee Johnson, and Bernie Maroney; to John Patchett, Margaret Wiersum, and Pat Dean, the telephone voice of Wisconsin medicine.

You know, Mrs. Dean epitomizes the nearly 100 staff back at 330 East Lakeside who work so hard not only to make us look good, but to do good. The fine legislation, communication, public health, and educational services would not be possible without these folks.

Now, before you applaud, I want to acknowledge someone who, though not with us in Green Bay tonight, has been with me in spirit and support throughout my medical career. Doctor Jerry Derus, who served as president of this society in 1973-74. During my senior year in medical school, I served my externship in his office in Monona. When it was time for him to attend the State Medical Society's Annual Meeting, he made sure I came along. He thought it was important that I attend and that I understand what the state society was all about. I've been attending and understanding ever since and I thank Jerry for his gift of inclusion. Jerry is now semi-retired and living in Dana Point, California.

Please join me in thanking all those who have made this year possible for me. Again, I thank you for the honor of serving as your president this coming year. And, my first executive order is to ask you to join me in the atrium outside this room for cocktails and dinner.

Thank you.

What I am asking each of you, my colleagues, the more than eighty-five hundred physicians in Wisconsin, to do this coming year is to be a physician tither. Pick a place where you can make a difference, make a contribution, and do it.

EVP Report to the House of Delegates
Sea of Change – Secrets of Success

John E. Patchett, JD

John E. Patchett, JD
Executive Vice President

It is with the utmost sense of responsibility, and stewardship, that I set sail with you on this new journey.

Mr. Speaker ---

Good Afternoon, and welcome. After six months on the job, I'm enjoying my first House of Delegates meeting with the SMS. And though I did experience 20 Annual and Interim meetings at the AMA and one at the Florida Medical Association, every one is a little different, and so I'm looking forward to this opportunity. I'm seeing many of you again. I'm seeing others of you, meeting you for the first time, and I hope before this meeting is over, I'll have the chance to meet every one of you and visit with each one of you.

First, I'd like to express my thanks to the Board, and in particular, the search committee, for providing me with this wonderful opportunity. And it is a wonderful opportunity to be only your fifth Executive Vice President in the history of the State Medical Society of Wisconsin, which is truly regarded as one of the top state medical societies across this country. And I must say that coming into Wisconsin, your reputation around the country is one of being very open-minded, very forward-thinking, very cutting-edged. And I can only say that the search committee verified that, at least in my mind, by selecting a lawyer who is an Iowa Hawkeye and a life-long Bears' fan. But as I've said several times around the state, I was disadvantaged growing up only having a semi-pro team to root for, so it's nice to be in Green Bay.

You've already heard Dave Kemp mentioned a couple of times. He's the one back there at the table that looks a little bit like Dr Brad Manning, but they aren't related. I encourage you to visit with him, as well, throughout the course of the next few days.

Several of you I know have met my wife, Mary Rita, and I thought she might be here by now. She's on her way to Green Bay, will be here for the next couple of days, and you should get a chance to meet her. But I can't resist telling one story on her and those of you who know her can hear her saying this. All of us, I think, who are married from time to time have a lingering in the back of our minds: well, do our spouses really love us? And how much do they really love us?

We were engaged in a conversation the other day that went something like this: "Mary Rita, you know, here we are in Madison, WI, a wonderful new community, a terrific new position with the SMS, some high degree of financial security, a beautiful new home, three lovely children. If I didn't have all of those things, would you still love me?" And she paused and looked at me and finally said, "Well, of course I'd still love you. I might miss you, but I'd still love you."

It is with the utmost sense of responsibility, and stewardship, that I set sail with you on this new journey.

I think we will all agree that this is a time of enormous change. For you in your practices as individual physicians, the science and art of medicine, the business and economics of medicine, the health care structures and systems, and certainly, for the SMS as it continues to evolve into the 21rst century as the professional association for Wisconsin physicians, and the preeminent advocate for the patients in this state. There are so many changes daily of a significant nature, happening so quickly, that it literally takes your breath away. It's no exaggeration to say that we are facing a sea of change. It is clear that for today, and the foreseeable future, change will be the norm, stability the exception.

This is a much different world than physicians faced even a few years ago. To effectively manage all of this change, you all have had to adapt, as well. We must think differently, "out of the box" as Dr Zastrow told the Task Force on Governance Structure in its first meeting. It must organize and govern itself differently, act differently, anticipate and understand members' changing needs, and become even more responsive. We must do this in order to continue our long tradition of accomplishments and success.

This fact of all of our professional lives should actually be viewed as a positive, providing us with the opportunity to continually evolve and improve. We have already begun to institute significant changes at the staff level with the staff structure, and I can anticipate you collectively as a House will have to anticipate significant changes in the SMS itself.

During my first few months here in Wisconsin, in my travels around the state, I've already had the chance to visit more

than 35 county societies, clinics and groups, and hospital medical staffs, and clinic leadership. Several things have become obvious already just in those visits. I have begun forming impressions. I've noted some of the problems that we face, but I remain very energized and excited about the opportunities that we have.

First, and always, today we need to ask the question of physicians in this state, "what can the SMS do for you?" We need to be responsive, to understand our members' perceptions of us in a world they now have to practice in and to anticipate your changing needs.

We need to demonstrate our worth to our members as a society to ensure that we provide real value, that your dues dollars are a good investment, short term and long term, that we are "compellingly relevant" for the physicians of this state. In the long run, the SMS will only be healthy with members who see that value and who want to belong, not simply because they have to do so because someone else is paying the dues or making the decision to do that.

We need to understand how our role as a state society is changing and how the role of the counties is changing as well. And we need to take responsibility to effect that change, as our federation relationships continue to evolve. Because some organizations have been slow to effect change, it is clear at least in my visits around this state, that an alarming and increasing number of physicians here in Wisconsin question the relevance of those entities.

And because of that, they are withdrawing from organized medicine altogether. Current rules and structures, coupled with some resistance to change which is truly natural on all of our parts are, in fact, already disenfranchising many of our members.

As a recent Baldridge award winner said, "If the world is changing faster than your organization, the end is rapidly approaching."

We need to find ways to connect or reconnect with our members and with nonmembers who are potential members, to ensure that they have a sense of ownership in the SMS, and to significantly increase the opportunities for meaningful participation in our society.

We need to continually re-examine the emerging technologies and take full advantage of them to involve more physicians in SMS policy development and activities. This includes our wonderful Internet presence - - WISMED -- and I hope all of you have seen it and used it, and our new statewide videoconferencing capabilities.

We need to create mechanisms and provide the necessary support to equip our members with the ability to cope with change and to develop the physician leaders of the future. And we need you and your colleagues as physicians who understand the importance of that role and are willing to assume that responsibility.

We need to learn to simultaneously compete and collaborate within organized medicine and with others as well. And sometimes I think that physicians who tend, by their very nature and training, to see things in a very black and white way, this is not always an easy thing to do. But this is true politically, in terms of the outside world, and equally true within the profession.

Business competition in this state within medicine cannot be allowed to destroy those things that untie you as a profession, as physicians and the collegiality within the physician community and the ability on a local level to provide the necessary community leadership to implement important public health measures in your own homes.

We cannot afford to allow the "Balkainzation" of medicine. We need to remember that especially in the future in the years ahead. We all learn more across boundaries than within them. That no one group or clinic or county or geographic region of the state or specialty can act or speak as effectively alone as you all can, collectively, together. One voice, one vision equals truly effective presentation.

I already mentioned taking advantage of emerging technologies. The computer, and the micro-chip, are truly changing our lives on a daily basis. Last month, at the AMA's national leadership conference, which a number of us had the chance to attend, a highly respected futurist named Frank Feather pointed out some key facts and a compelling assessment. He said among other things, the future will be information-based and knowledge-intensive.

A new PC is purchased in this country every two seconds. And 40% of those computers are going into people's homes. This information revolution is creating a new paradigm, a brand new socio-economic system and is redefining every business or association. Business is now primarily managing information and knowledge to a large degree. What is emerging is an electronic marketplace.

The successful associations of the future

The SMS must organize and govern itself differently, act differently, anticipate and understand members' changing needs, and become even more responsive. We must do this in order to continue our long tradition of accomplishments and success.

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will become digitalized, utilizing a multimedia approach to stay connected with their members, providing and sharing information, helping members differentiate and focus on that information and helping them cope with the info-glut.

It is clear in listening to Mr. Feather and others, that we must make the necessary investment in our infrastructure to ensure that we are positioned in the years ahead to provide these services and to meet our members' needs. We must add information technology to everyone's job.

Having said all of this, however, it's also essential to note that some things don't and should not change. And it is important to pause and take stock of your core beliefs and values as physicians. Your Task Force on Governance Structure did this recently when its members worked on drafting a new statement of the core purpose and values for the SMS.

In this era of right-sizing and reorganization with nearly every institution that we are familiar with, schools, churches, corporations, associations, the government, all going through such processes, all of us are searching for our corporate heartbeat, the pulse that defines our mission and purpose. In a world where everything seems in flux, having a sense of direction and purpose individually and collectively as a group is critical.

We are often surprised that this purpose is not something which needs to be invented, crafted, mastered, or manipulated. Many organizations have found that their corporate heartbeat is a given, which has simply been lost sight of or forgotten in our busy world today. Once rediscovered, the organization is free to experience the new life and growth that comes to those with a single mind and purpose.

What your Task Force discovered after struggling to articulate its core purpose was that their new version was in fact, very, very similar to the first written statement drafted by your State Medical Society predecessors more than 100 years ago.

It is also important to realize that, in spite of frustration which is understandable, often a sense of helplessness which I've sensed and heard articulated around this state, that you as physicians actually have much more power, and credibility, perhaps than you realize. You are physicians. In many ways that defines both who you are and what you do more so than for most people.

Only you can serve as true advocates for your patients. Only you have the power to maintain the high level of trust and respect, and only you can provide the comprehensive health care that patients want and have come to expect because of your education, your training and experience, and the high ethical standards to which you and your colleagues choose to hold yourselves. Ultimately, the system cannot function without you.

And in Wisconsin, more so than in most other states, physicians actually remain in substantial control and ownership of many of the health care systems themselves. This affords you advantages that physicians elsewhere in this country can only dream of today.

All of these things, and more, set you apart. You are empowered, always remember that. Think that way, and act accordingly. Never give up. To a large degree, you can truly manage this change. Take ownership and responsibility.

Successfully coping with this sea of change that you and the SMS faces requires I think four things: understanding, commitment, planning and action.

I believe you have sensed the urgency and you have demonstrated your willingness to change in order to succeed in the future, through your leadership, your strategic planning, and your vision and especially now, through your creation of the Task Force on Governance Structure.

Our past is history. The present is already gone. Only the future exists. Our past, the successes of the SMS in the years gone by, only guarantees us one thing today and that is the opportunity and the resources to continue to evolve, not just to survive into the 21rst century, but to thrive in that future.

This is the challenge, the opportunity, the excitement. I certainly don't stand up here pretending to have all of the answers, the secrets, if you will. But I promise you that I and your staff have the commitment and the energy and the willingness to change, to work with you in a teamwork approach, to ply these unchartered waters.

In closing, I leave you with the words of Longfellow, from his poem, "The Secret of the Sea:"

"Would'st thou" so the helmsman answered/

"Learn the secrets of the sea?"

Only those who brave its dangers, comprehend its mystery."

Thank you.

Awards given by SMS in 1997

Each year, during the Annual Meeting, the State Medical Society recognizes leaders in health care, both physicians and non-physicians, who have made significant contributions to the health and well-being of Wisconsin residents. The following awards were presented during the 1997 Annual Meeting in Green Bay.

Director's Award

The Director's Award is the highest honor bestowed by the SMS and is only granted on occasion to those who have served with outstanding distinction to the science of medicine, physicians and the residents of the state of Wisconsin.

Timothy T. Flaherty, MD, of Neenah, was the recipient of the 1997 Director's Award. Doctor Flaherty has served many capacities in the SMS including president, vice chair of the Board of Directors, chair of several commissions of the SMS, and chair of the Wisconsin Physician Political Action Committee (WISPAC) from 1989 to 1996. He is also a founding director of the Physicians Insurance Company-Wisconsin (PIC), was recently elected as chair of the PIC-Wisconsin Board, has served on the Governor's Task Force on Health Reform, and was founding director of SMS Services, Inc.

Doctor Flaherty has also held myriad national leadership positions including: member of the American Medical Association (AMA) Board of Trustees since 1994; AMA Commissioner to the Joint Commission on Accreditation of Healthcare Organizations; AMA Director of the Commissioner on Office Laboratory Assessment; chair of the AMA Advisory Council on Family Violence and advisor in the formation of the American Medical Accreditation Program.

In addition to his work with professional associations, Dr Flaherty was elected emeritus director of the Wisconsin College of Medicine, and serves as a clinical professor of radiology at both the University of Wisconsin Center for Health Services and the Medical College of Wisconsin.

Presidential Citation

The Presidential Citation is awarded each year by the SMS President to an outstanding individual. President Richard H. Ulmer, MD, was an active participant in the tort reform debate, and the 1997 Citation award winner worked very closely in getting this measure passed by the Wisconsin state legislature.

Doctor Ulmer presented **Sheldon Wasserman, MD,** with the SMS Presidential Citation for his leadership and legislative efforts on behalf of Wisconsin physicians and patients in the areas of tort reform and other health care related issues.

Doctor Ulmer commended for Dr Wasserman for his dedication and commitment to representing the views of Wisconsin physicians. Wasserman, who recently began his second term in the Wisconsin State Assembly, has distinguished himself as an active supporter of the State Medical Society's public policy agenda. His work on tort reform enactment led to a $350,000 cap on non-economic damages. He also authored legislation that proposed minimum lengths of stay for maternity patients and their newborns.

Distinguished Service Award

James Damos, MD, was selected to receive the 1997 Distinguished Service Award from the SMS, in appreciation of his ongoing dedication to excellence in medical education and research. The award is presented in recognition of Dr Damos' outstanding contributions to the science and art of medicine through his teachings and research in the basic sciences.

Doctor Damos is a faculty member and physician at the University of Wisconsin-Madison. He was in private practice in rural Wisconsin prior to joining the Department of Family Medicine in 1987 with the goal of improving family practice education and encouraging residents to do rural practice. He was instrumental in the development and implementation of the Advanced Life Support in Obstetrics (ALSO) and ALSO instructor courses. The ALSO course has had a significant impact on family physicians' comfort, training, credentialing, and expertise in obstetrics. The course is becoming standard for family practice in obstetrics training.

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Meritorious Service Awards

Each year during the Annual Meeting, the SMS recognizes leaders in health care who have made significant contributions to the medical profession, and who have given extraordinary service to the SMS, primarily through their tenure on a commission or committee. The following individuals earned 1997 Meritorious Service Awards:

- **Marshall J. Cushman, MD,** of Racine, recognized for nine years of dedicated service to the SMS Commission on Medical Liability and Risk Management, including one year as vice chair.
- **Harold G. Danford, MD,** of Appleton, recognized for six years of dedicated service to the SMS Commission on Continuing Medical Education.
- **Warren Holtley, MD,** of Marshfield, recognized for seven years of dedicated service to the SMS Commission on Continuing Medical Education, including five years as vice chair.
- **Robert Jaeger, MD,** of Stevens Point, recognized for nine years of dedicated service to the SMS Board of Directors.
- **Murray L. Katcher, MD, PhD,** of Madison, recognized for six years of dedicated service to the SMS Commission on Maternal and Child Health.
- **John D. Kenny, MD,** of Madison, recognized for 10 years of dedicated service to the SMS Commission on Maternal and Child Health, including one year as vice chair.
- **Thomas M. Kidder, MD,** of Milwaukee, recognized for 10 years of dedicated service to the SMS Commission on Medical Liability and Risk Management, including three years as chairp and two years as vice chair.
- **Bruce A. Kraus, MD,** of Columbus, recognized for nine years of dedicated service to the SMS Commission on Governmental Affairs, including two years as chair and one year as vice chair.
- **Larry LaCrosse, MD,** of Mequon, recognized for three years of dedicated service to the SMS Commission on Injury and Prevention Control, including two years as vice chair.
- **James P. Long, MD,** of Beloit, recognized for 10 years of dedicated service to the SMS Commission on Mediation and Peer Review, including one year as chair and one year as vice chair.
- **Edward O. Lukasek, MD,** of Sparta, recognized for 11 years of dedicated service to the SMS Commission on Addictive Diseases, and nine years of dedicated service to the Commission on Geriatric Health.
- **James A. Meyer, MD,** of Marshfield, recognized for nine years of dedicated service to the SMS Commission on Maternal and Child Health, including three years as vice chair.
- **George A. Pagels, MD,** of Racine, recognized for nine years of dedicated service to the SMS Commission on Mediation and Peer Review.
- **John K. Scott, MD,** of Madison, recognized posthumously for seven years of dedicated service to the SMS Commission on Medicine and Ethics, including one year as chair.
- **Rodney W. Sorensen, MD,** of Marshfield, recognized for 10 years of dedicated service to the SMS Commission on Medicine and Ethics.
- **Benjamin Wedro, MD,** of LaCrosse, recognized for 10 years of dedicated service to the SMS Commission on Public Information, including four years as chair and one year as vice chair.
- **Harry Zemel, MD,** of Fond du Lac, recognized for 10 years of dedicated service to the SMS Board of Directors, with eight years as a member of the Finance Committee, including seven years as the chair and four years as the SMS Treasurer.
- **Dianne L. Zwicke, MD,** of Milwaukee, recognized for 10 years of dedicated service to the SMS Commission on Continuing Medical Education, including seven years as chair.

Physician Citizen of the Year Award

Implemented in 1982 as a colleague-nominated award, the Physician Citizen of the Year award's annual nomination process was opened to the public in 1991. The result was an overwhelming outpouring of admiration and affection for Wisconsin's physicians. Each year since then, based on these nominations, the State Medical Society's Commission on Public Information selects up to eight award recipients from various SMS districts in the state.

The Physician Citizen of the Year award honors recipients for the uncompensated civic, cultural, economic, charitable, and health care services they have provided to their local or state communities, recognizing those who have given their time and talents to improve conditions in our state. The 1997 recipients of this distinguished award are:

- **Harry S. Caskey, MD,** of Clintonville, specifically recognized for his active membership with St. Martin Lutheran Church, including his involvement as an Adult Bible School teacher and office holder, member of the Wisconsin District Board of Education and volunteer with youth and school athletic programs. Doctor Caskey was also presented with the Citizen Award in 1977 by the Clintonville Education Association.

- **Thomas Cunningham, MD,** of Ashland, and **James Harp, MD,** of Ashland, were recognized for their work together in creating a cross-country ski trail in Ashland, making this sport more accessible to the people of the area. The project involved presenting their plan to the Mayor and City Administrator, working with city land owners and extensive fund raising.

- **Donald A. Jeffries, MD,** of Shawano, was specifically recognized for his chairmanship of the Police and Fire Commission, his volunteer efforts with the Boy Scouts, and church activities.

- **Kenneth R. Kidd, MD,** of Whitewater, was selected for his work with several organizations. Doctor Kidd is the founder of the Bethel House, which provides shelter and support for families in need; has been the Medical Director for the Whitewater Volunteer Fire Department for more than 10 years; the Fourth of July parade director for more than five years; coached the Girls Traveling Basketball Team and U-12 Boys Soccer Club team; was the 1996 Medical Director for the Badger State Games; co-chair of the Technology Today Committee for the Whitewater School District; a charter member of the Community Education Advisory Council; and serves as the Medical Director for the Fairhaven Retirement Facility.

- **Rosanna Ranieri, MD,** of Kenosha, was nominated by the Kenosha County Medical Society. She is recognized for her superlative service in many capacities including: creating two successful charity events for disabled persons, raising $40,000 for the Kenosha Achievement Center, and designing and implementing a "bed and breakfast" service for renal patients. Dr Ranieri is also famous for her home-cooking which has been auctioned off for thousands of dollars, with the proceeds distributed to the less privileged in the community. She is also politically active having overseen a campaign and is noted for her many successful fund raisers.

- **Frank Springer, MD,** of Elmwood, has been a practitioner since World War II. He was honored for his dedication to his profession and his volunteer work as a former community school board member and local ambulance medical director.

- **Duane Taebel, MD,** of LaCrosse, was selected for his service as the Festmaster for the Oktoberfest celebration, volunteer with Boys and Girls Clubs and president of the Board of Directors at English Lutheran Church.

- **Paul Webber, MD,** of Burlington, was recognized for his various volunteer efforts. Dr Webber serves as a St. Mary's Grade School board member; finance representative at St. Mary's Parish; Boy Scout committee member and leader; 4-H committee member and leader; member of the School Board election committee; chairperson of the Burlington Area School District Referendum Steering Committee (1996); and member of the Wellness Center committee.

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Physician Citizen Lifetime Achievement Award

Leo R. Weinshel, MD, of Whitefish Bay, received a Physician Citizen Special Lifetime Achievement Award. Dr Weinshel was recognized with this distinct award for his superlative service of over 50 years to the Badger Boys State Program. As a result of his involvement with the program, Dr Weinshel has received commendations from several state and federal agencies and representatives, including President Clinton.

In addition to his work with the Badger Boys State Program, Dr Weinshel has a long history of involvement with other community and professional organizations. He has been an SMS member for 60 years and received the SMS Physician Citizen of the Year in 1987. He has also been involved with the Boy Scouts, Red Cross, American Legion, and numerous other charitable organizations.

Certificate of Appreciation

Roger von Heimburg, MD, of Green Bay, was selected to receive the Certificate of Appreciation from the SMS, which recognized him for superlative service on behalf of the SMS in several capacities.

Dr von Heimburg served from 1988 through 1995, with the State of Wisconsin Office of Health Care Information; in 1990 he served as President of the State Medical Society; from 1987-89 he was Chair of the State Medical Society Board of Directors; he served as the Chair of the Blue Ribbon Task Force on Alternatives to the Tort System; from 1983-1987 served as Vice Chair of the SMS Board of Directors; and from 1980-1989 served as a Director from the Sixth District.

Dr von Heimburg practiced surgery for 30 years (1964-94) at both St. Vincent Hospital and Bellin Memorial Hospital in Green Bay. He also organized and taught the first course in Brown County for Emergency Medical Technicians from 1967-68. In addition, Dr von Heimburg served as President of the Brown County Medical Society in 1986.

Medical Issues Reporting Award

Established in 1990, this award is presented to Wisconsin journalists who best covers health care concerns during the preceding calendar year. Criteria for evaluating candidates include quality of writing, depth of research, excellence in production, accuracy, clarity, impact in Wisconsin, fairness, and originality. Reporters, working for Wisconsin newspapers, magazines, radio or television stations are eligible. The award is granted annually.

Renee Tessman, of WEAU-TV in Eau Claire, was selected as the 1997 recipient of the SMS Medical Issues Reporting Award. Ms. Tessman, a television journalist, was honored for two special reports entitled, "A Wholesome Place." The reports, focusing on domestic abuse, went beyond the usual scope of information and statistics, presenting a sensitive portrayal of domestic abuse within the viewer community. The reports communicated strategies for victims to get help, thereby advancing the health of the community.

Roger von Heimburg, MD, upon receiving a special Certificate of Appreciation.

Renee Tessman, WEAU-TV reporter, recipient of the 1997 Medical Issues Reporting Award.

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SMS 1997 President Elect.

Thomas Reardon, MD,
AMA Trustee, addresses the House.

Jerome Esser, MD.

Armond Start, MD.

Jessica Bartell,
Medical Student Delegate.

Michael C. Reineck, Speaker of the House of Delegates.

House of Delegates

Speaker: Michael C. Reineck, MD
Vice Speaker: Kevin T. Flaherty, MD

COUNTY	DELEGATE	ALTERNATE
FIRST DISTRICT		
Kenosha	Patricio Luis B Ilada, IV	Steven A Azuma
	John C Noonan	Spencer J Block
	John S Pallin	Stephen P Feuerbach
	James M Schoening	Nina Kayeum
Milwaukee	Alhert H Adams	Maury B Berger
	Sara Arnold	Paul J Coogan
	Melbourne D Boynton	Howard J Croft
	Gregory B Buck	Kevin M Fickenscher
	James D Buck	Mehran Heydarpour
	Clarence P Chou	Daniel B Jankins
	John M Coffey	David C Olson
	Steven K Dankle	David A Slosky
	Donna D Davidoff	Benjamin J Teitelbaum
	Gerald J Dorff	Jose O Toledo
	John J Eversman	Walter Khe Tian Wong
	Edward S Friedrichs	47 Vacancies
	Reynaldo P Gabriel	
	Michael H Gilman	
	Lucille B Glicklich	
	Gerald G Govin	
	William W Greaves	
	Deborah J Grosenick	
	Richard J Hodach	
	Susan L Kaehler	
	George F Kessler	
	David H Klehm	
	Vijay V Kulkarni	
	Kesavan Kutty	
	George M Lange	
	Gary J Leo	
	Edith L Lepgold	
	William E Martens	
	Dean D Miller	
	John P Mullooly	
	Clifford J Opatken	
	Thomas E Palmer	
	James T Paloucek	
	Jazmin D Parcon	
	Wayman Parker	
	John R Petersen	
	Robert F Purtell, Jr	
	William G Raasch	
	Nanjappareddy M Reddy	
	Thomas A Reminga	
	Evan K Saunders	
	Jay F Schamberg	
	George R Schneider	
	Sidney Shindell	
	Juanito P Singson	
	Ron H Stark	
	Rohert H Straub	
	Leon Cass Terry	
	C R Triyamhakaraj	
	Frank H Urban	
	Wess R Vogt	
	Sheldon A Wasserman	
	DeLore Williams	
Milwaukee (continued)	J Frank Wilson	
	James E Youker	
	Carol E Young	
	Laurens D Young	
Ozaukee	Gregory J Gnadt	Tracy L Bretl
	Scot A Wilfong	C M Meenakshisundaram
Racine	Mark E DeCheck	S Marshall Cushman, Jr
	Dennis J Kontra	Kenneth J Pechman
	Marvin G Parker	Carol W Potts
	Lawrence W Platt	Gregory A Shove
	Santiago L Yllas	James M Soyka
Walworth	Irwin J Bruhn	Edsel G Doreza
	Vacancy	Vacancy
Washington	William M Claybaugh	William J Listwan
	John G Fink	Vacancy
Waukesha	Rohert O Buss	Lynn L Baldwin
	Randi W Hart	Katherine M Bayliss
	Charles E Holmburg	Brian A Chapman
	Julie N Larsen	John J Foley
	Timothy G McAvoy	Terrence N Hart
	G Daniel Miller	John J Kelly
	Michael G O'Mara	Thomas J Luetzow
	John R Park	Matthew A Meyer
	John D Riesch	Albert J Motzel, Jr
	James A Stadler, II	Gwendolyn Tanel
	Mark A Timm	Gregory N Van Winkle
	William L Treacy	Sridhar V Vasudevan
	Lee M Tyne	Vacancy
SECOND DISTRICT		
Columbia-Marquette-Adams	Robert T Cooney	Martin L Janssen
Dane	Adam H Balin	William H Bartlett
	John W Beasley	Calvin S Bruce
	Christine H Biedermann	John D Kenny
		Ivan Knezevic
	Thomas H Browning	Fred H Koenecke, Jr
	Andrew B Crummy, Jr	Bradley L Manning
	Haywood S Gilliam	Robert A McDonald
	Judith N Green	Steven L Oreck
	Kay A Heggestad	Joseph F Sackett
	Cyril M Hetsko	William E Scheckler
	Susan N Isensee	Richard W Shropshire
	William L Kopp	Bonnie M Tompkins
	Richard D Lindgren	Susan M Torhorst
	John C McDermott	Anne C Weiss
	Paul A McLeod	10 Vacancies
	Bernard F Micke	
	Richard G Roberts	
	Alan I Schwartzstein	
	Rohert B Shapiro	
	Armond H Start	
	John A Vukich	

Continued on next page

COUNTY	DELEGATE	ALTERNATE
Dane (continued)	John D Wegenke	
	Richard O Welnick	
	William A Wood	
	Vacancy	
Dodge	Ayaz M Samadani	Sharon L Haase
Grant	Kurt Wilhelm, II	Larry O Sy
Green	Carleton B Davis, Jr	George E Breadon
	Robert L Vickerman	Jan E Erlandson
Iowa	Timothy A Correll	Vacancy
Jefferson	Michael A Grajewski	Roland R Liebenow
	Wahab A Kazi	Vacancy
Lafayette	Joseph P Gibes	Lori L Neumann
Richland	Vacancy	Kay M. Balink
Rock	F Ward Blair	7 Vacancies
	Leo C Egbujiobi	
	David C Murdy	
	Larry M Ojeda	
	Arthur C Plautz, Jr	
	Christopher Stroud	
	Kathleen M Wick	
Sauk	Donald W Vangor	Thomas R Flygt
	Vacancy	Vacancy
THIRD DISTRICT		
Crawford	Michael S Garrity	Vacancy
Juneau	David M Hoffmann	Leon J Radant
La Crosse	Wayne A Bottner	Steven A Bowman
	Gary L Bryant	Timothy J Buckley
	Thomas J Grau	Christopher M Huiras
	Paul J Leehey, III	Elizabeth A Leistikow
	Paul H Steingraeber	Charles E Link
	Benjamin C Wedro	Brian M Mulrennan
	David E Westgard	Gary A Susag
Monroe	Kevin A Jessen	Edward O Lukasek
Trempealeau-Jackson-Buffalo	Jeffrey K Polzin	Elmer P Rohde
Vernon	Mark H Andrew	Duane M Koons
FOURTH DISTRICT		
Clark	Demetrio C Maguigad	Florentino E Lleva
Forest	E Frank Castaldo	Vacancy
Langlade	James O Moermond, Jr	Vacancy
Lincoln	Jeffrey L Moore	Jerome S Mayersak
Marathon	Kenneth L Day	5 Vacancies
	Jeffrey H Lamont	
	Sally S Mattingly	
	William C. Nietert	
	Vacancy	

COUNTY	DELEGATE	ALTERNATE
Oneida-Vilas	Bruce K Jacobson	John G Nemcek
	William E Raduege	Gary A Peitzmeier
	Vacancy	Vacancy
Portage	Steven C Bergin	Robert J Jaeger
Price	Everin C Houkom	Dean W Funk
Taylor	Edwin K Cole	Michael A Haase
Wood	Ali K Choucair	Michele Lee Bachhuber
	Richard W Clasen	Tarit K Banerjee
	Richard A Dart	Edna O DeVries
	Ade R Dillon	Larry K Heath
	William J Henry	Mario V Ponce
	Robert E Phillips	Dean T Stueland
	Theodore A Praxel	Susan L Turney
	Homer H Russ	Victoria L Viegut
FIFTH DISTRICT		
Calumet	William E Hannon	Vacancy
Fond du Lac	John B Butler	Jonathan Gedye
	David R Weber	3 Vacancies
	2 Vacancies	
Green Lake-Waushara	Vacancy	Vacancy
Outagamie	Mark H Beard	Peter V Podlusky
	Gregory A Johnson	6 Vacancies
	Richard A Johnson	
	4 Vacancies	
Waupaca	Ali H Mardan	Terry L Hankey
Winnebago	James L Cauley	7 Vacancies
	Albert L Fisher, Jr	
	Johan A Mathison	
	James P Siepmann	
	3 Vacancies	
SIXTH DISTRICT		
Brown	James M Berner	James V Lacey
	Diane K Christel	Cynthia B Lasecki
	Robert K DeMott	7 Vacancies
	Rance J Hafner	
	Thomas P. Koehler	
	Rolf S Lulloff	
	Wesley E McNeal	
	Jonathan W Thomas	
	John W Utri	
Door-Kewaunee	John J Beck	Vacancy
Manitowoc	Edward J Barylak	Thomas K Perry
	Joseph C DiRaimondo	Joseph E Trader
Marinette-Florence	Karen B Himmel	Linda J Werner

COUNTY	DELEGATE	ALTERNATE
Oconto	Ellen A Blando	James J Wallace
Shawano	Patricia J Stuff	Vacancy
Sheboygan	William P Chleborad	Patrick R Marsho
	David J Deubler	James R Pawlak
	Roger G Klettke	Paul V Tuttle, III
	Wendelin W Schaefer	James L Weygandt
SEVENTH DISTRICT		
Barron-Washburn-Burnett	Philip S Henkel	James F Maser
	David J Henningsen	Vacancy
Chippewa	Gerald A Gehl	Philip A Swanson
Eau Claire-Dunn-Pepin	John E Agens	Robert J Fabiny
	Philip J Happe	5 Vacancies
	Edgar O Hicks	
	Charles V Ihle	
	Daniel L Johnson	
	James J O'Connor	
Pierce-St.Croix	Clifford C Tenner	James R Beix
Polk	Arne T Lagus	William W Young
Rusk	Douglas M DeLong	Vacancy
EIGHTH DISTRICT		
Ashland-Bayfield-Iron	George A Fall	Mark K Belknap
Douglas	Kathleen M Broad	Timothy L Burke
Sawyer	Modesto M Ferrer	Kathy J Keimig

SECTIONS	DELEGATE	ALTERNATE
Allergy & Clinical Immunology	Reid M Olson	John E Basich
Anesthesiology	Edwin L Mathews	Paul G Spottswood
Cardiology	Michael P Cinquegrani	Lee S Wann
Cardiothoracic Surgery	Charles C Canver	Vacancy
Dermatology	James N Icken	Donald J Miech
Emergency Medicine	Peter J Holzhauer	Vacancy
Family Physicians	George L Gay, Jr	Daniel R Sherry
Group Practice	Philip J Dahlberg	Vacancy
Internal Medicine	John K Paulson	Vacancy
International Medical Graduates	Patricio F Viernes	Vacancy
Long-Term Care	Bruce A Kraus	Richard S Kane
Medical Students Madison	Jessica M Bartell	3 Vacancies
	2 Vacancies	
Medical Students MCW	James K Robinson, III	Tiera C Nell
Neurology	Wendy L Larson	Vacancy
Neurosurgery	Mohammed Rafiullah	Vacancy
Obstetrics-Gynecology	Patricia A Barwig	Dennis A Sobczak
Ophthalmology	Jack L Hughes	Vacancy
Organized Medical Staff	Paul A Wertsch	Masood Wasiullah
Orthopedics	James A Rydlewicz	Vacancy
Otolaryngology	Paul M Fleming	Vacancy
Pathology	Ronald R Martins	Raymond C Zastrow
Pediatrics	Carl S L Eisenberg	Grace M Heitsch
Physician Medicine & Rehabilitation	Frank J Salvi	Diane Wolf Braza
Plastic Surgery	Andreas Doermann	Vacancy
Preventive Medicine General	Henry A Anderson, III	Jane K Sliwinski
Psychiatry	Kenneth I Robbins	Mary Alice Houghton
Radiation Oncology	Sally M Schlise	Vacancy
Radiology	Fred E Klein	Timothy T Flaherty
Resident Physicians	Jerome A Esser	Douglas L Schulz
Surgery	James P Quenan	Jeffrey A Blink
Thoracic Medicine	Edward R Winga	Vacancy
Urology	Thomas W Wood	Randle E Pollard
Young Physicians	Edwin M Overholt, II	Vacancy

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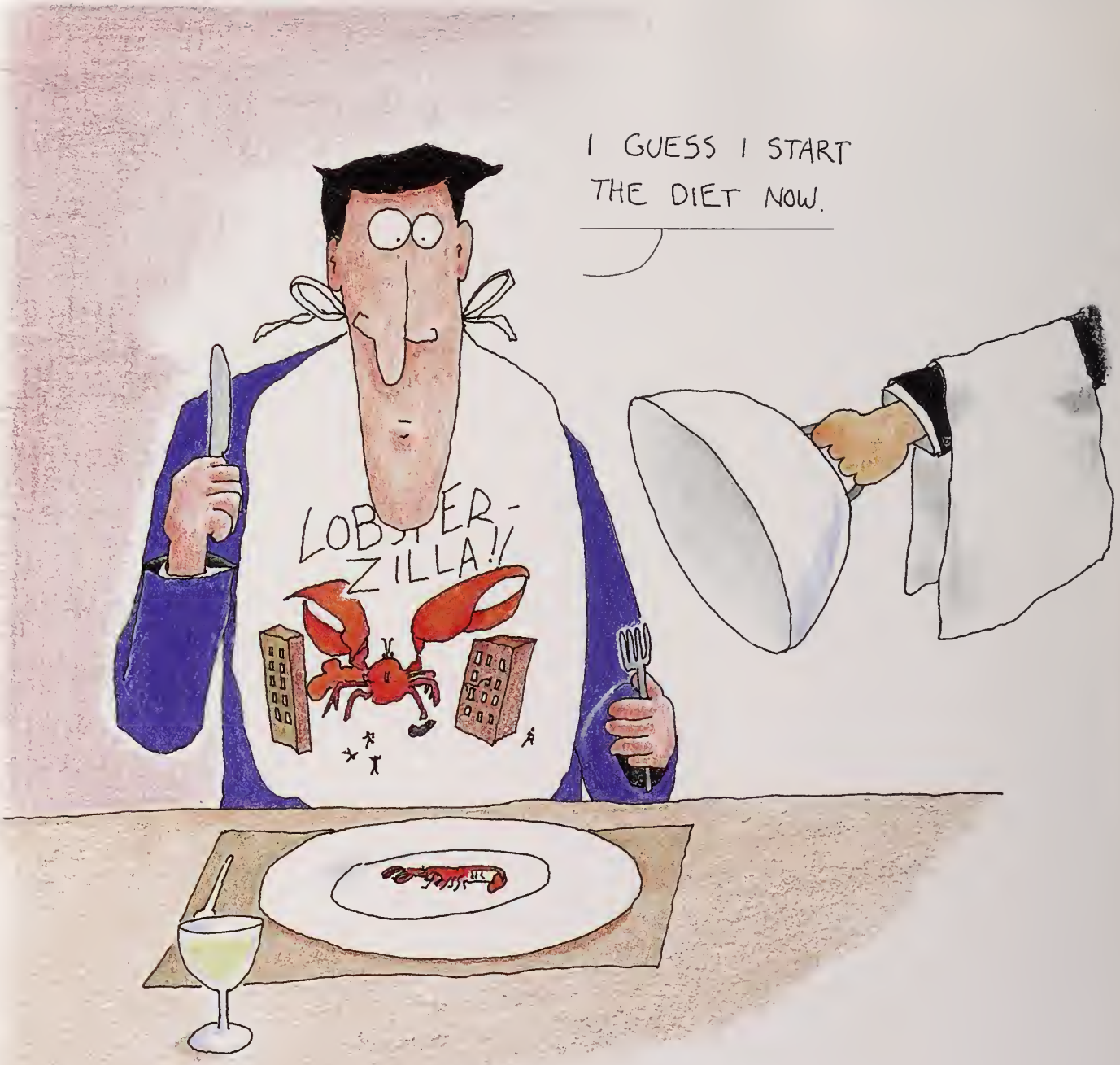

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